WAR OF THE SCIENTISTS By John Russell Fearn

VOLUME 14 NUMBER 4

See Back Cover

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Fish Men of Venus

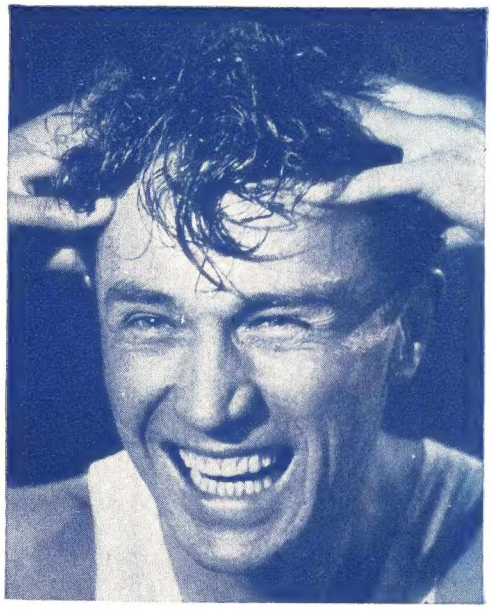
by DAVID WRIGHT O'BRIEN

AMAZING STORIES

APRIL 1940

THORNTON AYRE ★ A. R. STEBER ★ MILTON KALETSKY

Good News! for DANDRUFF SUFFERERS



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Clinical Tests Showed Marked Improvement in 76% of Cases

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APRIL
1940

AMAZING STORIES

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Volume XIV
Number 4

WITH this issue of AMAZING STORIES, we enter our fifteenth year of publication, and with 14 years of science fiction behind us, we feel sure that looking a whole year ahead will not be amiss. Already your editors are planning a gala anniversary issue to commemorate the occasion. How about suggestions, readers? It's your magazine, and maybe you have ideas on what kind of an anniversary issue you'd like to see?

TALKING about the past, it seems that repercussions are still being felt from Orson Welles' invasion - f r o m - Mars broadcast last year.

Recently a n amateur hypnotist was rehearsing a demonstration he was scheduled to make over a popular radio program. Fixing his eyes on a studio stenographer, he said: "You are going to sleep, to s-l-e-e-p . . ." And the girl went to sleep! He turned to another girl, and at the magic word she too fell asleep . . .

Suddenly the studio officials started from their absorbed attention. They had just remembered the M a r s broadcast — *and how susceptible to suggestion the radio audience had been shown.* No, the broadcast was off! They couldn't risk putting five million people to sleep.

Personally, your editor thinks it would have been a tremendously interesting experiment, because it's been done in science fiction, and we'd like to know whether radio suggestion is as powerful as some of our authors have painted it.

AN added point on this suggestion thing (maybe the radio officials were thinking mostly of their sponsors, rather than the danger—for what good are commercials addressed to a snoring public?) comes from Princeton. They have taken a more serious view on this peculiar susceptibility of the country to suggestion. At the present moment it has a project investigating the Welles' broadcast as a special *Study of Mass Hysteria.*

"The secret of atomic power right in my grasp, and the Electric Company gets huffy about the bill!"

IF you want to take a weather-scientist's word for it, you'd better get out of Manhattan! Because just by way of variation from the usual run of possible world catastrophes predicted by the astronomers and physicists, such as the moon falling into the earth, the sun flaring up into a gigantic nova, or increased cosmic radiation reversing the course of evolution, a weather man has this to say.

He points first to last year's hurricane which missed Manhattan b u t struck nearby Long Island, killing 600 people. *If,* says the meteorologist, such a gale were to strike Manhattan — *a t t h e wrong time*—not all its towering steel and concrete could save the city from a greater ruin than could be spread by a horde of invading Martians! For a 100 mile an hour hurricane w o u l d *raise the Hudson River 13 feet in an hour.*

If the river happened to be at high spring tide, within those sixty minutes the water would engulf all Manhattan, pour down into subways, trapping passengers like flies, and fill the automobile tunnels leading out of the city from end to end with solid cylinders of water—leaving New York isolated, a City of the Dead! Your editor certainly is glad he lives in Chicago!

FREDERIC ARNOLD KUMMER, Jr., writes: "I have a fan club which meets at my place. A

(Continued on page 141)

Brian Thomas lay staring in blank horror at something unknown

THE CASE OF THE MURDERED SAVANTS

By THORNTON AYRE

EVEN the scientific detective, Brutus Lloyd, was baffled by the mystery that surrounded the murder of America's finest men of science... or *was* it murder?

"ANOTHER scientist murdered! Extry! Extry! Paper, sir?"

"Yeah." Rex Thomas took the evening edition of the *Observer* and studied it with a frown—indeed, more than a frown. There was a look of blank horror on his young, good-looking face.

Dr. Brian Thomas, famous metallurgist, Rex Thomas' own brother!

"It isn't true," Thomas whispered to himself, stupefied. Then he went on, thinking aloud,

"A knife in his heart like all the others before him? No—it's too damnably horrible!"

And he was the fourth scientist in a row! Four prominent scientists in as many months—

Horley, the great neurologist had been slain first. In quick succession had followed Bennet of physics, Jansen of astronomy and now—

He looked up sharply, controlling himself as he became aware of people on the sidewalk glancing at him curiously. With sudden decision he thrust the paper in his pocket and headed swiftly for police headquarters.

Inspector Branson, the bull-necked, chief of the neighborhood precinct station, looked up from his desk as Thomas was shown into his office.

"Inspector, I—I just read about the murder of Dr. Brian Thomas. He was my brother, my twin brother. I'm Rex Thomas, radio specialist."

Branson smiled faintly. "I'm aware of that, Mr. Thomas. Matter of fact, you've saved us the trouble of roping you in for questioning."

"Roping *me* in—?" Rex Thomas echoed in amazement.

"We're satisfied with your actions," Branson said reassuringly. "At the time of the murder, you were working overtime at the Apex Radio Factory—last night, that is. Don't worry; we know all about you.

"We wanted to question you about your brother's associates. Do you know any of them? If we can get a clue to anybody who might have a reason for getting him out of the way, we might have a lead that will direct us to an arrest. Can you recall anybody likely to have a motive for wishing your brother out of the way?"

Thomas scratched his blond head.

"Guess not," he sighed. "I came here to ask if you'd got any line on the killing—though I don't suppose you would tell me if you had. I rarely saw my brother. He lived in a world of his own—a scientific world of research. I have

my life; he had his. All I know is that he lived in a house in the suburbs with one manservant. I can't imagine who'd want to kill him."

"Hm-m." Branson compressed his lips. "Just as we can't yet see why this steady murdering of scientific men is going on. No apparent motive. It's the damnedest thing I ever heard of!"

"A maniac, perhaps?" Thomas suggested, thinking hard.

"Perhaps— However, while you're here you can add your identification to the body. It's in the morgue." Branson pressed a button. "After you have identified the body, you are free to go, but not out of the city. You'll probably be needed later on. Everybody connected with your brother is under suspicion at the moment."

"I understand," Rex Thomas nodded; then as the plainclothes man came in he turned and left in his company.

At the morgue he went through the ordeal without a word, merely nodding his head dazedly as he gazed on the waxen face of his dead twin—a face so like his own.

HE hardly recalled how he went out into the street again. Though he had had few dealings with his ambitious, scientific brother, the murder had come as considerable of a shock. Thomas went home to his apartment lost in thought. He was just in time to catch the telephone ringing noisily.

"Yes?" he said absently into the mouthpiece.

"Hello, Rex!" It was the familiar voice of Beryl, his fiancée. "I rang before but I got no answer."

"No—no, I'm late." Thomas roused himself. "I've been at police headquarters."

"That's what I'm calling about. I've just seen the paper. It's terrible, Rex! Terrible! What are you going to do? What are the police going to do?"

"I dunno. I've got to stay in town, that's all I know. But I don't think I'll have much trouble—my alibi is watertight."

Thomas forced himself to realities, put more warmth in his voice.

"Thanks for the sympathy, Beryl—thanks a lot!"

"But of course I had to sympathize!" she cried. Then, quietly, "But I admit I had another reason too. Are you fit to come to the dinner tomorrow night? You know, the one dad is throwing? It's a pretty highbrow affair, I suppose, but there'll be lots of ignorant folks there, like you and me, who aren't interested in scientific mumbo-jumbo. After what's happened I wondered if you'd be fit to—"

"I'll come," Thomas said briefly. "Don't worry, I'll be okay. I've yet to see the event that makes me pass up an evening with you. See you tomorrow evening, dear."

"Around seven. Good-by."

"'By, Beryl."

Thomas hung up slowly, then shook himself.

"This won't do, Rex, m'lad! Snap out of it! Grab yourself a shower, a bite and some shut-eye. Then you'll be all set."

He followed out his own prescription accurately—but when it came to sleeping, he hit hard against a problem. The moment he started to doze something happened to him. It was as though he were dreaming while still awake.

A vision, hazy in outline but nonetheless distinguishable, insisted on hammering itself into his consciousness. He could have understood a strong recurrent reminder of his radio work, for he had been working until all hours on a new receiving set design for weeks—but this was something utterly different.

The scene represented some sort of

laboratory, or else a surgery. It seemed to be filled with chemical and medical apparatus, electronic tubes, magnets, mazes of wire. In the center of the room was a long surgical table, obviously for the purpose of major operations, if the arc-lights, at present extinguished, hanging overhead were any guide.

But easily the most puzzling thing of all was the presence of six chairs, like those used by a dentist, with helmets on the top of each. Curious helmets, indeed, like those of an aviator's outfit. On a rack nearby, shielded by glass screens, were numberless probes, scalpels, and saws. . . .

Thomas woke up sweating, cramped his eyes shut, then opened them again. Convinced he was the victim of a nightmare, he tried to settle himself again. But the vision came back, in a slightly changed form. For a brief moment or so he saw his brother—his *dead* brother—lying on the formerly empty surgical table, gazing in sheer terror at something unknown.

Straps were about the other's body, pinning him down. His head had been shaven as bald as a peeled egg. He seemed to be saying something, struggling to speak.

"Brian!" Rex Thomas screamed suddenly, sitting up. *"Brian!"*

HE was shuddering all over. Shakily he switched on the bedlight and gazed around the quiet, deserted room. Nothing was any different.

The events of the day, of course! The horrible things that had happened had all warped into his consciousness and produced this. It had to be a dream, because his brother was dead. . . .

He waited a long time to calm himself, and thereafter slept at fitful intervals with visions here and there. He felt pretty washed out by the time he rose next morning. And sown deep in his mind was a profound bewilderment.

Many a time in the past his being a twin had given him unexpected visions of his brother, particularly in time of trouble—but how could it apply to this occasion when his brother was in the morgue?

A bad dream—nothing more.

REX THOMAS arrived to attend Beryl's dinner party after a day of gradual recovery from his heavy night. The immense sweep of the girl's home—the residence of Jonathan Clayton, famous inventor—the myriad lights, the efficient servants, the cordial voices, did much to clear Thomas' mind. And the girl herself, an entrancing dark-haired, gray-eyed vision in evening dress, practically consummated the cure.

"Hello there, Rex!" Beryl came forward eagerly as he entered the great lounge and picked his way among the guests. "How's tricks?"

She smiled at him impishly, then seeing his serious face she went on,

"Anything wrong, dearest? You look tired— Your brother, of course?"

"Yes—sort of preying on my mind." He shrugged his shoulders. "But I swore I'd leave my troubles at the front door, and I intend to."

Someone else was greeting him then.

"Glad to see you, Rex." It was the girl's father who came up with extended hand. Big, gray-headed, strong-necked, he looked more like a champion athlete than an inventor—and probably the best inventor the United States Government had ever employed for regular service.

"Evening, sir." Thomas returned the grip. "You seem to have quite a few people around here tonight. I—"

"Indeed, yes! Come along, I want you to meet some of them. See you later, Beryl."

The girl nodded slowly, her face clearly disappointed at the sudden separation. But her father was determined. One by one Thomas found himself being introduced to some of the country's leading scientific experts. Among them were the ax-faced, unpleasantly sharp Professor Eliman, wizard of brain surgery; and then a gnomelike little man under five feet in height, with an immense forehead down which curled a lock of hair shaped in a Napoleonic "J".

This little man was talking in a surprisingly bass voice to Joseph Clough, the financier, when Jonathan Clayton tapped him on the shoulder.

"Lloyd—a moment. I want you to meet my prospective son-in-law. Rex, meet Dr. Brutus Lloyd. You can call him an expert in any branch of science and criminology, and be right every time."

"Correct," Lloyd beamed, extending his small hand. Then, his frosty gray eyes narrowing a little, he added,

"Clayton errs, my young friend. He should have said prospective *step* son-in-law. Eh, Clayton?"

Clayton shrugged. "I regard Beryl as my own daughter."

"*Culpa levis*—excusable negligence," Lloyd sighed. "Unfortunately my profession demands an accuracy of facts—even to daughters. If either of you think the less of me for the correction, it won't make the least difference."

CLAYTON said nothing. Rex Thomas gave a faintly puzzled smile, the smile of a man who hears the unexpected for the first time.

Then he said, "I seem to have heard of you before, Dr. Lloyd."

"*Seem* to!" Lloyd echoed, glaring. "Before you, young man, you behold the greatest scientist of the day—*teres atque rotundus*, a man polished and complete."

"Don't mind him, Rex," Clayton chuckled. "He got that way from reading Latin in his chemistry experiments, and—"

"Of course," Lloyd said, changing the subject, "you're the brother of the late Brian Thomas?"

"Yes, and there's something I'd like to—"

Thomas broke off as Beryl came up in high spirits.

"So here you are, Rex! Dad, what do you mean dragging him off like this to meet your brain-bulging cronies? We've things to talk about."

Thomas found himself whirled away, but for the life of him he could not find the inspiration necessary to rise to the intended jollity of the occasion.

"Sorry, Beryl," he apologized, as the girl went in to dinner on his arm. "I've a heck of a lot of things on my mind. Tell me something—your last name isn't really Clayton, is it? Dr. Lloyd let the cat out of the bag."

Beryl shrugged. "I never thought it mattered. After all, you're going to change my name anyway, so why worry?"

"I'm not worrying," Thomas said. "You're all that counts, anyway. Incidentally, is Dr. Lloyd here professionally or as a guest?"

"Guest, of course. He's known dad quite a long time. Why?"

"Just wondered if he could explain something rather queer. It'll do later."

The girl glanced at him curiously, but said nothing. For some reason she spoke little during the dinner; and Thomas for his part ate little. He was aware of feeling rather out of the conversation, which seemed to shuttle back and forth between financial expositions on the part of Joseph Clough and scientific comments by hatchet-faced Professor Eliman.

Dr. Lloyd seemed to have little to say, but Thomas noticed his shrewd little eyes darting from one face to the other as he dug heartily into the well-prepared courses.

Rex Thomas felt thankful when the meal was over. Quietly he took Beryl to one side.

"I'm going to borrow Dr. Lloyd for awhile. Mind?"

She sighed. "Seems I've little choice. You're sure *I* can't help you? I'm good at patching up troubles."

"You'd fail this time. See you later, darling."

Thomas caught Dr. Lloyd in the hall as he was crossing with Jonathan Clayton to the lounge.

"Oh, doctor, a moment! I wonder would you mind very much if I consulted you?"

The little scientist halted and frowned. "I have hours for work and for play, Mr. Thomas. While appreciating your desire to utilize my vast powers, I must say—"

"But this is urgent!" Thomas cried. "Desperately urgent!"

"Well—" Lloyd stroked his "J" of hair pensively. "All right," he agreed.

"Take the library," Clayton invited, throwing open the door for them. "See you later."

CHAPTER II

The Stained Scalpels

"NOW," Dr. Lloyd snapped, as the door closed, "I have little time for trifles, Mr. Thomas. Please come to the point immediately."

"Fair enough. It's about my brother, Brian. He was murdered like three other great scientists before him, and nobody knows why, the police least of all."

"Hah!" Lloyd snorted, his small face cynical.

"He was murdered," Rex Thomas went on tensely, "and yet last night I had the strangest dream. In fact, it wasn't a dream—more a kind of vision. In that vision my brother was still alive, yet only a few hours before I had seen him in the morgue."

Lloyd gestured irritably. "I am not here to play games, Mr. Thomas. What is this? A new insight into nightmares, or what? I have no time for half a story. *Qui timide rogat, docet negare,* young man—he who asks timidly courts denial! Be frank. I, Brutus Lloyd, order it."

"Sorry, sir. I thought—" Thomas shrugged, puzzled by the scientist's odd manner.

"You see," he went on, "it struck me as strange that I should get a vision like that with Brian dead. We were twins and—well, twins often get visions of each other doing things. Common between them. Sort of telepathic link, you know."

Lloyd's eyelids lowered insolently. "I require no tutor in scientific matters, Mr. Thomas. However, the statement is interesting and—A, twinship with a dead body is intriguing, and—B, the problem of the recent murders has commanded my attention. So—continue!"

Thomas obeyed, and during the narrative Lloyd sat perched like a gnome on the edge of the desk, stroking his lock of hair thoughtfully. When it was over he raised an eyebrow.

"A laboratory, eh? Helmets? Dentist's chairs? Hm-m! You are quite sure it was your brother's body in the morgue?"

"But of course! I'd not be likely to mistake my own twin, would I?"

"Twinship of minds—twinship of motives," Lloyd mused. "Hm-m—most interesting."

"Again," Rex Thomas said slowly,

"I'm wondering if the murders will stop now. Suppose Dr. Clayton happened to be the next one."

"If he did, grief would descend on Beryl, eh?" Lloyd asked dryly. "You want me to clear all this up in order to save your fiancée from distress."

"Partly that, yes," Thomas admitted. "It will take a detective of your ability to get to the bottom of the whole thing."

Lloyd rose in scorn. "Detective!" he sneered. "I, sir, am a specialist! I do not work for gold, but for pleasure. God gave me a brain beyond the normal, and I use it. If, of course, the Government should reward me afterward—Well, *exitus acta probat*—the result justifies the deed."

"You mean you'll look into it?"

"For three reasons," Dr. Lloyd responded. "A—I must find out for the sake of my psychology notes how a dead man can impress a living twin; B, I must find out why an unknown laboratory has chains like those in a dentist's surgery, and C"—he smiled blandly—"the mightiest of brains needs relaxation. This case will provide it."

"I don't think so," Thomas said nervously.

"What you think is mere foolishness, young man. Have you enough pull to get yourself a brief vacation?"

"I guess so."

"Excellent! I shall need you probably for physical aid; I am no Hercules. Mentally I am more than sufficient. You will be at my house at exactly nine tomorrow morning. And now, *redire ad nuces*—let us return to the 'nuts,' " Dr. Lloyd punned.

He opened the door and marched briskly to rejoin the guests.

IT was late in the evening when most of the dancing and fun were over that a knotty point of argument arose among the scientists. It led them finally, Rex Thomas and Brutus Lloyd included, into Jonathan Clayton's own private laboratory.

"Here you are then, gentlemen—synthetic flesh!" Clayton cried triumphantly. "Does this convince you or not?"

He raised something that looked like pink rubber from a bowl and stretched it back and forth.

"The latest miracle for surgical work," he added quietly. "Practically as good as the real thing, full of minute fibers to carry the bloodstream. Doubt it if you can!"

"You see, it doesn't do to doubt the mind of Dr. Clayton," observed Professor Eliman, smiling cynically. "I've known about this invention for some time, only it wasn't ethical to reveal it without permission."

"And I'm grateful for your confidence," Clayton said seriously. "This is not a Government invention; I can use it privately and aid medical science immensely. I had hoped to create life—"

"Waste of time, in my opinion," Joseph Clough commented. "I made my money soaking people, not helping them. However—"

"I suppose," Lloyd remarked, "*you* financed this synthetic flesh idea, Clough?"

"Sure. I've financed dozens of Clayton's private inventions. Plenty in 'em, on the side."

"*Auri sacra fames*—accursed lust for gold," Lloyd sighed. Then as the scientists gathered round to inspect the synthetic flesh, he wandered slowly around the laboratory, his keen eyes glancing up and down. Presently he stopped at a horizontal mirror lying directly under a massive telescopic tube.

The mirror was rather surprising. It was not polished and clear, but of unusual construction.

"My latest," Clayton said proudly,

hurrying up. "Not quite ready yet for offering to the astronomical field. It's an element detector."

"Can it be that I, who know all things scientific, am at a loss?" Lloyd mused, frowning.

"Probably, this time. This is a new idea. Watch!"

Clayton moved to a switchboard and busied himself with controls. The laboratory roof rolled open along a section to a clear moonlit sky. Upon the mirror there appeared the moon's image, but instead of the usual craters and seas there was a multitude of network colors of every imaginable hue.

"The moon," Clayton observed. "Ordinarily it is revealed as a white surface, of course. What minerals and ores it may possess are unknown—or were unknown until I invented this.

"It is a well-known fact that different metals give off different light-values, ordinarily indetectable. But this instrument of mine, by a prismatic system, can detect different light-values by reflection instead of actual illumination."

"Clear as mud," one of the scientists laughed.

"I'll make it clearer," Clayton apologized. "We know the elements of any star by the flame color we get through the prisms. *Reflected* light has defeated us so far—but I've solved it. Hence the reflection of light from the moon reveals clearly what elements it has.

"See"—he pointed his finger at a dull gray streak—"here is lead. Probably a great field of solidified lava. In turn, we have iron ore deposits, gold seams in considerable quantity, silver, oxides—"

"REMARKABLE!" Lloyd exclaimed, his eyes brightening. "A satellite worth a good deal, eh?"

"Definitely," Clayton smiled, switching off. "A world of valued metals revealed for the first time through my

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invention—but unhappily a world two hundred and forty thousand miles off, and unreachable—as yet."

"I've suggested ways and means of crossing space—in fact, most of us here have—but our host won't listen," Professor Eliman said. "Sometimes I think you're unprogressive, Clayton. A genius, and yet too conservative. You say space conquest means wars—horrible wars."

"I do," Clayton sighed. "That is one reason why I am rather reluctant to reveal the secret of this detector to any but my immediate friends. When men realize what is up there, in the sky—"

"And there are other dangers," Thomas put in quietly. "A maniac is at work somewhere killing off brilliant scientists. Suppose you were singled out, once your profound knowledge became known?"

"Absurd!" exclaimed Professor Eliman, with a cynical grin. "The maniacal killings of scientists are not worth considering. At least, *I* am not afraid, and I am sure Clayton is not."

" 'Course he isn't!" exclaimed Joseph Clough reassuringly.

"I just happened to recall my brother's murder, that's all," Thomas said quietly.

Clayton gave a shrug. "Isn't this getting rather depressing, gentlemen?" he asked. "Suppose we repair to the lounge."

Lloyd marked time with the group until Rex Thomas caught up with him.

"This is not the laboratory you saw in your vision, I suppose?" he asked softly, as they went through the doorway.

"No. And in any case I wouldn't distrust Dr. Clayton. I know him too well."

"Many of the dead scientists were his friends," Lloyd murmured. "*Fide, sed cui, vide,* Mr. Thomas—trust, but see whom you are trusting."

"You don't think—" Rex Thomas stared, appalled; but Lloyd only gave an unfathomable smile and gently massaged his "J" of hair.

WHEN Rex Thomas arrived at Dr. Brutus Lloyd's suburban house next morning, he found the little scientist ready and waiting in his open roadster outside the gates. If anything, Lloyd's big Derby hat and enormous overcoat made him look odder than ever.

"About time!" he snapped testily. "Get in!" Then as he started the car moving he added, "We're going to see Inspector Branson. He has the matter in hand. Good man, Branson—within limits."

"So I thought."

"Your opinions do not concern me, Mr. Thomas. Tell me, did you have any more visions last night?"

"Well, sort of. I saw that unknown laboratory rather hazily, but not my brother."

"Yet if you saw the visions and they are directly connected with your brother, it seems to indicate he is still alive," Lloyd mused. "In other words, *mens invicta manet*—the mind remains unconquered."

"Yeah—something's damned phony somewhere and I don't like it."

Lloyd said nothing further, seemingly lost in thought until police headquarters was reached. Then he marched into Inspector Branson's office holding his crook-handled, neatly rolled up umbrella.

"Morning, Branson. Four scientists have been murdered—all with knives. What have you done about it?"

"I—"

"Nothing!" Lloyd thumped his umbrella on the floor. "Just nothing! And for this we pay a sales tax, a prop-

erty tax, and Heaven only knows what else!"

"So," Branson said bitterly, "you've decided to bust in with some high-flown scientific theories, eh?"

"There is no law against a specialist, Branson—and *such* a specialist! You ought to be grateful. *Brute ad portas*—Brutus is at the gates!"

Branson gave a resigned sigh. "Okay, I know it's useless to try and get rid of you. Matter of fact, this scientist business has rather got me stymied anyway."

"Ah!" Lloyd's eyes glittered with approval.

"So few clues—in fact, none at all," Branson growled. "In each case, the murder was committed in a room which has a gravel path outside it—so there were no soil footprints or anything else to guide us. No finger marks on the knives or anywhere else."

"And each time the murderer drove the knife straight to the heart?" Lloyd asked slowly.

"Straight to the heart," Branson affirmed.

"Hm-m. The paper mentioned surgical knives. I'd rather like to see them."

"Right." Branson pressed a button and gave instructions to the clerk who entered. "I think they're called scalpels," he added.

"You think! *Vis inertiae!*"

"Huh?"

"The power of inertness," Lloyd beamed, snuggling back in his chair. "Of course, I admit that genius is only given to the few—"

Then he straightened up again as the clerk returned with a steel box. Branson laid out the ticketed and labeled knives on the desk with his handkerchief.

"Exhibits One to Four," he commented briefly.

THE diminutive scientist studied each one in turn, narrowed his eyes at the tarnished stain on the gleaming blade in each case.

"Scalpels, yes," he said slowly. "But the stains?"

"Blood, according to the laboratory. The scalpels are leading us to look for a surgeon as the culprit. And—"

"Blood tarnishing stainless steel?" Lloyd asked pointedly. *"Da locum meliorbus,* my friend—give place to your betters! Blood!" he sneered. "Clear those boneheads out of your laboratory and get some real men of science. This isn't bloodstain: it's an acid of some kind—and it's on each knife, too."

"But I have the report—" Branson began, but Lloyd waved a small hand.

"Light your pipe with it! Don't presume to talk to me of science, Branson."

He pondered a moment, then wrapped one of the knives up in his handkerchief and thrust it in his pocket.

"I'm taking this—and don't start any arguments. I want it for two reasons—A, to prove what the stain really is; and—B, to prove to a very dense world that it is not always the obvious solution which is the right one."

"In other words, you aim to make a monkey out of me?" Branson snapped.

Lloyd chuckled as he headed for the door, remarking dryly to his puzzled client,

"Avito viret honore, Mr. Thomas—he flourishes on ancestral honors. You'll hear from me later, Branson."

"I'd better!" Branson roared, as the door closed. "You're stealing my evidence!"

CHAPTER III

The Dead Undead

"IT is possible," Dr. Brutus Lloyd said, as he drove down the street, "that—A, your visions were *not* the re-

sult of supper; and that—B, your brother Brian is not dead, or at least was not dead when you saw him in your vision.

"It is likewise possible that—C, extreme fear caused telepathic power to be established between you. That is by no means uncommon in twins."

"But I saw Brian in the morgue! You forget that!"

"I forget nothing!" Lloyd retorted. "Nothing!"

He became silent after that, patting the knife in his pocket reflectively now and again. Once he arrived home, he stalked straight into his laboratory, threw on a gigantic smock, then went to work on the knife with reagents and burners. Thomas, interested but baffled, lounged around watching.

At last the little scientist straightened up and fondled his lock of hair.

"Bloodstains! Bah!" he exploded finally. "The stain on this knife contains proportions of sodium chloride—salt, to the uneducated; phosphate, lime, a trace of sulphuric acid, and cochineal for coloring. No man with that mixture in his veins could ever live. No man—not even I, and I can do most things."

"Then where did the stains come from?"

Lloyd said slowly, "The facts are these: A—the knives were found in the heart each time; B, they were removed by the police, and the blades would not be contaminated with anything else afterward, that much is certain; and—C, they contain the fluid which was in the bodies at the time. That is obvious."

"Then why didn't the police chemists find the mistake?"

"They probably did — they *must* have, but they couldn't reconcile the mystery, so they said it was bloodstain. You understand?"

Rex Thomas scratched his head. "Damned if I do! Sounds nutty to me."

"Branson referred to accurate stabbing by the murderer each time," Lloyd mused. "We are asked to believe that the murderer was able to drive true to the heart on *four distinct occasions.* I don't believe it!"

"Then just what do you believe?"

"I believe that the bodies were never alive anyway!"

"What!"

Lloyd grinned insolently at the sensation he had created. He added calmly,

"Synthesis, my friend! Synthetic flesh!"

"But, dammit it all—" Thomas gave a gasp. "Say, Dr. Clayton is the one who understands synthesis. But it is inconceivable that—"

"Palmam qui meruit ferat, Mr. Thomas—let him bear the palm who has deserved it. Yes, he invented synthesis, *but— W*hat I do not like are—A, the sinister implications behind all this; B—the suggestion of its being a cover-up for something else; and—C, the decided shadow cast across Clayton."

FOR a long time Dr. Lloyd stood brooding over the knife in his rubber-gloved hand; then turning suddenly he picked up the telephone and dialed hastily.

"Hello, there! This Branson? Good! This is your superior, Brutus Lloyd. I want you to exhume all four murdered men right away. They never lived, anyway—"

The receiver squawked in response and Lloyd stood glaring at the instrument.

"What do you mean, am I mad?" he snorted. "You're talking to Brutus Lloyd, Branson—*clarum et venerabile nomen*—an illustrious and venerable name! I am a scientist; you are not. Therein lies infinity— You *what?* Why, man, I believe the four scientists never

died by a dagger but were actually used for some other and probably more diabolical purpose."

AGAIN the receiver rattled with Branson's irate voice.

"My reasons?" Lloyd asked calmly. "A—the blood on the knives might be a mixture worth selling to a chemical works; B—no murderer could strike dead true to the heart four times on the run, and—C, most significant of all, the scientists who are presumed dead would probably be far more useful alive.

"Dig up those corpses! What? Oh, I'll bring the knife with me tonight. See you at seven, and you'd better have a body dug up. No reason to? The Brian Thomas death hasn't been looked into yet? Then conduct your autopsy on him. See you at seven."

Lloyd put the receiver back, and as he did so Rex Thomas added,

"Of course, Brian won't be buried yet. His immediate associates have planned a big funeral. I heard about it this morning. I asked to go, of course—tomorrow. Only you wanted me, you said, and—"

"I fancy that the events of this evening will make the undertakers short of a job," Lloyd murmured. Then more brightly, "But now for lunch, my friend. This afternoon my brain will knit into a concrete whole what it has already learned; and this evening— Well, *flectere si nequeo superos Acheronta movebo*—if I cannot move the Gods, I will stir up hell! Come!"

ON the stroke of seven, Dr. Brutus Lloyd's goblinlike figure walked into Inspector Branson's office. The inspector was looking rather bewildered but he was cordial enough.

"You were right," he said, as Lloyd returned the knife to the desk with a clatter. "Come and see the result of the autopsy. Only been at work on the so-called Brian Thomas so far, but the other bodies are probably the same—"

"Definitely!" Lloyd thumped his umbrella down. "Don't dare to doubt it!"

He and Thomas followed the inspector to the surgery down the corridor, and presently stood gazing at the result of the medico's work under the bright lights.

It was the corpse of Brian Thomas which lay there—and when he could bring himself to look fully at it, for the medical mutilation had rather sickened him, Rex Thomas experienced dumb wonder. For it was not a real man which lay there—but a contrivance of springs and padding which gave the illusion of stiffness and yet fleshy pliability! The rigor mortis of a dead body was perfectly simulated.

The staggering fact was that the "man" was only a model with a flesh covering. There were no internal organs, not even a heart. The wound from the assassin's scalpel had simply passed through the outer casing.

"This—this is incredible," Thomas whispered. "So like my brother; even to the eyes."

"Dead eyes always remind me of dusty grapes," Lloyd murmured. "These eyes probably belong to a wall-eyed dog. They give the impression of death."

"As to the identity of appearance to the real Brian Thomas, any expert modeler could do it with synthetic flesh as easily as with clay, if he had the frame to work on," Branson said thoughtfully.

"Which reminds me—I've got some new information. Crandal, the well-known sculptor, has disappeared. Been missing for several months now. His relatives thought he had gone to South America, but they seem to think now that something must have happened to

him. They asked us to help only this afternoon. Seems to me it might mean something."

"There *are* times when I realize why you became an inspector," Lloyd commented cynically. "Crandal, eh?" he repeated sharply. "Hm—. I seem to recall a lot of his big sculpture shows were financed by Joseph Clough. Mystery, indeed! *Crescit eundo* — it increases as it goes."

"This synthetic flesh is a new one on me," Branson muttered, shaking his head. "And as to the *reason* for such elaborate precautions—I give up."

"Without an autopsy, you would have considered this and the other three bodies to be normal corpses," Lloyd observed. "Proof indeed that my genius is far ahead of the normal intellect." He pushed his Derby farther back on his scholarly brow and said gravely,

"Branson, we face a crisis!"

"So I've figured for some time," Branson said sourly.

"Consider the facts! We have—A, somebody with a knowledge of synthesis and sculpture; B, such a person must be a brilliant scientist, and—C, when four famous scientists are picked out *by* a scientist, it is for a reason distinctly detrimental to the victims and the world at large. Otherwise, *why* the precautions?"

LLOYD paused, then added, "Suppose, Branson, that you had found synthesis. Impossible, I know, but suppose you had? Suppose you could model a man at will but could not make him live. What would you do?"

"Open a waxworks, maybe," Branson hazarded, rubbing his jaw.

"Or else make imitation corpses, fix daggers all ready in their apparent hearts, and steal the real people!"

"Hell! You've got something there. But one couldn't model a person so accurately without knowing every detail of his physique."

"Most of that could be overcome by photography," Lloyd snapped. "And cameras can fit into a tie pin if necessary. Personal contact would help, of course; therefore we can assume that the culprit knew each of the dead scientists very well indeed. Well enough to know every anatomical detail worth knowing—"

"The culprit's a doctor; got to be," Branson said doggedly. "Those scalpels prove it! Seems to me the thing to do is to check up on the immediate acquaintances of the four dead scientists and start a new trail from there. Eh?"

Lloyd smiled blandly. "Commendable—but do you imagine so clever a criminal as this one seems to be would appear as *himself* each time when near his intended victims, just to provide you with a clue? *Satis eloquentiae, sapientiae parum,* Branson — eloquence enough, but so little wisdom!"

"Then we'll look for somebody who knows something about synthesis!" Branson retorted.

"That's easy," growled Rex Thomas. "Dr. Clayton invented it."

Lloyd put a hand to his eyes and thumped his umbrella on the floor.

"Deus avertat!" he groaned. "God forbid! He has to go and throw away my most important clue like that — Idiot!" he blazed, waving his umbrella overhead. "Why the heck don't you keep your trap shut?"

Branson smiled bitterly. "Keeping things back, eh, Lloyd?" he asked coldly. "Trying to steal a march again with your cockeyed science? Okay, we'll see! I'll have Dr. Clayton roped in on suspicion of murder in two bats of an eyelash. Why, the thing's a cinch!"

"Wait!" the little scientist roared, his gray eyes frigid with command. "Wait, confound you! I'll not have you upset-

ting my well-laid plans! I wasn't trying to hold back anything. Why should I? I can outthink you any time. No, I wanted to piece together one or two things first."

"Yeah? Such as?"

"A—would Clayton freely admit his knowledge of synthesis if he were connected with an affair like this? B—what is the connection between Clayton and his wife?"

"Wife?" Branson stared. "I thought she was dead."

"No. I found out long ago that his wife, the mother of Beryl, is serving a life sentence in a State penitentiary. Her name before marrying Clayton was Kimberley. Beryl is the stepdaughter of Dr. Clayton, of course."

"So what? What's all this got to do with synthesis?"

Lloyd sighed. *"Brevis esse laboro, obscurus fio*—in laboring to be brief I become obscure. Not that I expected you to see anything in the observation anyway," he added tartly. "You—"

"Oh, the hell with all this!" Branson interrupted impatiently. "I've got to pin a conviction on somebody, and Dr. Clayton is that one man."

"NOW wait a minute!" Lloyd snapped. "Get this, Branson. I'm not obstructing you in your duty, but I have certain privileges I mean to exercise. I can't stop you clapping a warrant on Clayton—but I want two clear hours in which to see Clayton first. In taking him out of the way, you may ruin the best clue I've got. Now, what about it?"

Branson hesitated. "Well, all right. I guess that can't make much difference—but I warn you, it'll be too bad for you if you mess things up!"

"If *I* mess things up!" Lloyd smiled insolently; then, thumping his Derby back into position on his head he moved to the door. *"Festina lente,* Branson—make haste slowly. Come, Mr. Thomas."

Out in the corridor Rex Thomas came out with a string of apologies. The only response he got was a flinty glare from Dr. Lloyd's gray eyes.

"Well, I'm sorry anyway," Thomas repeated, as they settled in the car. "But just what do you figure you can get out of Dr. Clayton?"

"A solution," Lloyd snapped. "Now keep quiet. I must think."

He started up the engine with a sudden roar. Soon the car left the comparatively quiet main street, headed through the heart of the city, then out to the night-swathed country road leading to the scientist's suburban residence.

"Listen, sir," Thomas said presently, "what do you make of all this? For instance, I didn't know Beryl's mother was in prison. What's that angle?"

"There isn't any. At any rate, not yet. I put it in to give that fool Branson something to work over. Pity about Branson—he's got brains, only they're muscle-bound."

"Well, about my brother? Do you think he's still alive?"

"Possibly—" Lloyd was silent for awhile, then unburdened himself again.

"Let us consider. A—the four scientists have been kidnaped and models of their bodies left in their places to present the impression of murder. B—their deaths would set the police looking for a murderer and *not* a kidnaper. C—we also realize that the kidnaper knew he could not return the bodies, hence the synthetic duplicates.

"Therefore, surely your uneducated brain can grasp that something fiendish is indicated which will incapacitate said scientists from any chance of return!"

"Good Lord—yes!"

"Ah! *Interdum vulgus rectum videt*

—sometimes even the rabble see things aright. The kidnaper would have no reason to take the scientists if he intended to kill them. He could do that without leaving models. And what are scientists noted for?"

Lloyd preened himself for a moment in his own ego.

"For their *brains,* young man! Their brains!"

"You don't mean they have been kidnaped so something can be done with their knowledge?"

"Exactly! In that vision of yours you saw a surgery and your brother with a shaven head. Heads are shaved before brain operations—"

Lloyd's small face was set into granite lines now.

"*Graviora manent,* my young friend —the worst is yet to come. The man who made the synthetic bodies is a first-class modeler—and we may assume the disappearance of Crandal, the sculptor has something to do with that. A first-class surgeon would be needed for the synthesis. And that—"

DR. LLOYD broke off and glanced in the rear-view mirror as the roaring of a powerful car became evident behind them. Rex Thomas twisted round in his seat and was met with a dazzling blaze of headlamps.

"Doing sixty, I'd say," he cried. "If he's not careful— Hey, what the devil —"

He fell back in his seat and stared ahead in wild alarm at the narrow road. Almost at that moment an immense sedan swept alongside and suddenly drove inward.

Lloyd's small hands missed the steering wheel of his roadster entirely. The car twisted sideward, careened over the bank, then went smashing helplessly through a mass of scrub and dust to the base of a deep ditch. It brought up with a crash on its side.

Head singing from the impact, Thomas eased his position and listened for a moment. For the time all was quiet;— then at a sudden flash and crackle of flame from the engine Thomas came to life.

"Dr. Lloyd!" he yelled. "Hey, where are you—"

"Here!" the scientist panted, struggling to free himself. He became visible against the rapidly gaining flame, his Derby jammed down onto his nose.

"My foot— Give me a tug, dammit! Can't see where I am—"

Thomas fell out onto the grass, caught the little scientist round the waist and heaved with all his strength. They both fell clear as the ignited gasoline spurted and crackled over the remainder of the car.

With a sudden effort Lloyd tore his hat free, stood glaring at the flaming wreck and stabbing his still safe umbrella fiercely in the ground.

"Deliberate!" he breathed, his bass voice quivering. "Now we *know* there is something definite. Scum! *Servum pecus!* Servile herd! That car cost me plenty— However, the insurance is paid up."

"We're losing time," Thomas told him anxiously. "Whoever was in that car was heading Clayton's way. Incidentally"—he frowned—"I got the number just before we went over the bank. What was it now—XJ 4782."

Lloyd looked vaguely surprised. "So, there are times when another brain can be quicker than my own. Remarkable! Now stop driveling and help me up the bank. Swine! They'll pay for this!"

At the top of the bank Lloyd stared grimly down the dark road.

"About four miles further yet to the Clayton place," Thomas said.

"I am quite aware of it. Come on."

As they trudged Thomas said, "Won-

der how they knew it was us in your car?"

"You mean *me!*" Lloyd retorted. "You don't count, Mr. Thomas. The enemy has nothing to fear from you, whereas they stand appalled at my genius. Seeing you, the brother of the missing Brian Thomas, and me in close company for several days—for I do not doubt we have been surreptitiously watched—and finally seeing us emerge from police headquarters and head this way, it would be sufficient for the dumbest criminal to grasp that we threatened danger.

"We were singled out for destruction by 'accident'. Plenty will probably happen now."

"You're right. We'd better hurry—"

"I am not a track-runner—nor have I legs like an ostrich. *Ultra posse nemo obligatur*—none is obliged to do more than he can."

AFTER that they trudged on wearily in silence, for something like forty-five minutes. Then they moved quickly to the side of the road as a fast car came speeding up from the distance with headlights blazing. To their surprise it stopped beside them and Inspector Branson's familiar voice came forth.

"Well, well, if it isn't Brutus himself! Out of gas? Or isn't that possible?" the inspector finished with malicious meaning.

Lloyd ignored the challenge. "Where the devil are you going?"

"To the Clayton residence. Got a call from there a few minutes ago from the head servant or somebody. Old man Clayton's been stabbed and—"

"And you sit there making wisecracks?" Lloyd roared. "Get a move on, man! Quick!" he bawled at the driver. "Get in, Thomas—don't stand there gaping."

The car shot forward again. Pinched beside Branson, Lloyd said briefly,

"They had the impudence to run me off the road. It was a black sedan, number XJ 4782. Send out a squad car to nab it, and you will also probably get the man we want—and Dr. Clayton."

"But he's stabbed—"

"More modelwork, I fancy. Anyway, we'll soon find out."

CHAPTER IV

Ambition Diabolical

ONCE they got to the house and were shown into the library by a worried manservant, they found Beryl there alone, pacing nervously up and down and twisting a handkerchief in her hands. In a moment Rex Thomas ran from the group and clasped her in his arms.

"Okay, Beryl, take it easy," he murmured. "You're all right. We are all here now—"

"*I* am here," Lloyd stated didactically, with a flourish of his umbrella. "And I still pin you to your two-hour promise, Branson. I'm going to do the talking here."

"That'll be a change, anyway," Branson admitted sourly.

Lloyd's eyelids drooped cynically, then he swung to the girl.

"Now Miss Clayton—or rather Miss Kimberley—where is the body?"

The girl looked at him in tearful surprise.

"But—but Dr. Lloyd, why so official? You usually call me 'Beryl'—"

"Where," he repeated calmly, "is the body? I am here as a specialist, not as a guest."

"Do you have to be so damned blunt?" Thomas snapped.

"Yes. *Necessitas non habet mores*—necessity knows no manners. I—"

"Father's in—in the laboratory,"

Beryl said quietly; then with a sudden hysteria,

"It's so horrible! Awful! Parker—that's the manservant—heard a crash in the laboratory and went in to investigate. It's terrible to think dad might have lain there all night otherwise."

"And Parker phoned for the police?" Branson asked curtly.

"Of course. In fact, he had done it before I knew of the tragedy."

Branson gave a sympathetic nod. For his part Lloyd turned briskly, and from familiarity with the house went straight through the hall and into the laboratory—that same laboratory in which the gathering had taken place only the previous night.

Without pause, the scientist went to the sprawling figure lying face upward on the floor, knife buried in its heart.

The moment he held the dead wrist Lloyd gave a grin.

"More rubbish for the garbage can, Branson," he announced briefly. "Body's stone cold, even though it has been dead for supposedly only an hour or so. Synthetic, like the others."

"W-what?" Beryl gasped in amazement, hanging onto Thomas' arm.

"A phony," Lloyd said. "See—" And ignoring the girl's cry he yanked the knife out of the breast and drove the keen blade across the outflung hand. In response the first finger was sheared off clean. But it was as hollow as the finger of a glove.

"It's horrible! Horrible!" Beryl whispered, gazing.

"At least you might be more considerate in your stunts, Lloyd," Thomas snapped, noting the girl's white face.

"Do not presume to dictate procedure to me, Mr. Thomas!"

"What does it all mean?" the girl broke in urgently. "Where *is* my stepfather?"

"Kidnaped," Lloyd said briefly. "Branson, have some of your men look the grounds over. There ought to be footprints this time."

His keen eyes went round the laboratory and finally focused on the unlatched main window and an overturned instrument stand below it.

"Clumsy fools," he murmured. "That is what startled the manservant, obviously. That fallen stand. Had the body remained until morning, as was intended, its coldness would have seemed natural— Hm-m!"

"What?" Branson asked, as he saw Lloyd gazing at an instrument case. As the scientist made no answer, the inspector went over to him and looked upon the glittering array. Then Branson's brows knitted. Of ten scalpels, five of them were missing from their clips.

"BERYL," Lloyd said, more familiar again, "how often did Dr. Clayton practice surgery?"

"Not very often—except sometimes when Professor Eliman used to call and they made experiments together. Why?"

"Each of the knives that have been stuck in these four—or rather five—model bodies have come from here!" Branson retorted. "That's why!"

"But—" The girl looked mystified; then Lloyd said slowly,

"Since Dr. Clayton was not heard to call for help, it is possible that he was threatened with a gun by somebody at this window here. Hm-m— Beryl, your stepfather was the only inventor of synthetic flesh in this country, wasn't he? Or I should say, *isn't* he?"

"So he led us to believe, yes. But surely, Dr. Lloyd, you are not trying to suggest he made a model of himself, are you? That *he* is behind all this?"

Lloyd glanced at the instrument case and stroked his chin.

"No, I think he has proved himself innocent," he said. "Nor would he be likely to kidnap himself. That clear to you, Branson?"

"Well, yes—though I have known criminals to apparently rub themselves out in order to make themselves appear one of the victims."

"*Semel insanivimus omnes*—we have all been mad at some time," the little scientist observed. Then with sudden decision,

"No—not Dr. Clayton. I've known him a long time and he's on the level. But somebody else, close to him, is *not!*"

"Well?" Branson waited expectantly, as Lloyd pulled his "J" of hair resolutely and muttered to himself.

"*Quaestio vexata*—a vexed question. Give me time! A great brain hastens slowly—"

"Yeah, and while you're spouting Latin, Dr. Clayton is probably in danger of his life! That reminds me—I've got to send out a call for that squad car. Be back in a minute."

Branson went out vigorously; and presently Lloyd said,

"Your father—stepfather—made no secret of his synthetic invention, Beryl; but he *did* suppress the formula, to the best of my information. That right—or did anybody else know the formula besides him?"

"Why, yes—practically all the scientists who came to see him—most of whom have been murdered since, or kidnaped."

"Hm-m," Lloyd mused. "And to scientists synthetic flesh would appeal from the scientific and not the diabolic point of view. The only man closely acquainted with Dr. Clayton who is not a scientist is Joseph Clough."

"The financier? Yes," Beryl admitted. "But aren't you forgetting that he helped to finance many of father's inventions?"

Lloyd gave a grim smile. "*Ubi mel, ibi apes*—where the honey is, there are the bees! I am just recalling that Joseph Clough also knows from this telescopic mirror here that there is gold on the moon—"

"Gold on the moon!" echoed Branson, coming in. "What's going to happen next?" he demanded. "Anyway, I've given that car number to headquarters; they'll put out a tracer for it. My boys tell me there are footprints about the grounds, all right—heavy ones, as though something had been carried by the person whose feet made the impressions. And—"

"If you have quite finished—" Lloyd said coldly. Then in the surprised silence he went on talking.

"Clough, from his long association with Dr. Clayton, must know all about synthesis, just as he knows the physical details of the other scientists he kidnaped. Don't you see? He knows from that mirror that there is gold on the moon—a vast fortune, if he can only *get* it!

"Gold is the one bait a man of finance would fall for, whereas a scientist would not."

"SOME day," Branson said, "I shall know what you are talking about. You mean Joseph Clough, the Wall Street big shot?"

"None other. My unerring judgment leaves no other conclusion."

"Except the one that the critics are right when they call you nuts," Branson commented. "Anyway, where's the proof?" He waved his hands helplessly. "What *is* all this about gold on the moon?"

Lloyd told him. The inspector nodded dubiously.

"Maybe, but that gold is an awful ways off."

"Two hundred and forty thousand miles," Lloyd stated calmly.

"And empty space between! How do you figure any guy could get it?"

"That," Lloyd said, gazing around under drooping eyelids, "is what puzzled Joseph Clough! So he kidnaped five of the best scientists to have them work it out! I recall a remark made in this laboratory last night, to the effect that Clayton had refrained from trying to master space travel for fear of possible after consequences."

"And I remember something too," Beryl put in, thinking. "Sometime ago, though, Mr. Clough once asked father and some of his scientist friends if they would pool ideas and try and work out a way to get at the gold lying on the moon —that and the other valuable ores.

"They refused for the same reason as father—because it might invoke wars and crime. Besides, they were pretty sure they couldn't figure out a method —anyway, not individually."

Branson murmured, "They wouldn't do it of their own free will, so they may be having to do it by force."

"Couldn't figure it out *individually,*" Lloyd breathed. "But if it were done *collectively*— My God!" He stared blankly in front of him. "If a surgeon were fiendish enough, he could—"

Lloyd swung around. "If five of the greatest brains in the country were brought together to give a common result, there is no end to what might not be done! Science would leap ahead at terrific progress!"

"You mean mechanically pooled brains?" Rex Thomas asked slowly.

"Yes! You saw the operating theater, didn't you? The fake bodies were stabbed with surgical knives, and they were taken from here with the obvious intention of deflecting guilt onto Dr. Clayton—until it came time for him to be taken as well.

"A—Joseph Clough is the money behind the enterprise; B—Crandal, the scultpor, has been 'appropriated' to make models; C—we are still short of a scientist to do the actual brain surgery, if any. Whom else but Professor Eliman, the renowned wizard of brain surgery? He, of all men, has avoided being attacked so far! Of course—because he is the culprit!"

"I believe you've got something there," Thomas said. "Remember how damned sure Eliman was last night that he wouldn't be overtaken like the rest of the scientists?"

"I've got to admit it, Lloyd, you know your surgeons," Branson said reluctantly. "Next thing we do is head for Eliman's place and rope him in for questioning."

"No!" Lloyd shook his head adamantly.

"What d'ya mean, no?"

"GIVE me time to speak!" Lloyd retorted. "Rushing to his home won't do any good—besides, you'd need a warrant anyway, or maybe you know that. Clough isn't the kind of mug to come because you ask him. What we need to know is all important—namely, the whereabouts of the laboratory where all the dirty work goes on!

"*Fons et origo malorum*—the source and origin of our miseries. There's one way to find out—make a phone call to Clough and play my hunch. If it's right, he'll unwittingly lead us to his laboratory."

"We've a phone here—" Beryl began, but Lloyd waved her aside.

"I shall phone within watching distance of his house. You stay here. There may be danger. Come, Branson!"

TWENTY minutes later Dr. Lloyd was making his call. Branson

crammed into the phone booth beside him with his ear to the outside of the receiver. Lloyd covered the mouthpiece with his handkerchief and raised the pitch of his rumbling voice a little.

After preliminaries with a servant Clough spoke.

"Well? Who is it?"

"Something's gone wrong," Lloyd said briefly. "Better get to the laboratory right away. I'll see you there."

Clough seemed to hesitate. "If you mean that clown Brutus Lloyd is on the track, don't let him worry you."

Lloyd glared at the instrument and said gruffly,

"I can't explain any more now. Hurry up. It's urgent!"

He hung up and asked laconically, "Well?"

"Guess your hunch was right. He's in it all right," Branson admitted. "Seems to have summed you up pretty well, too. Think he'll fall for the gag?"

"We'll soon know."

They climbed back into the car, moved farther up the road and into a side street. Sure enough, a monstrous limousine drew up after a while outside the Clough residence and the financier himself came hurrying out. After a quick glance up and down he jumped into the car and it moved smoothly away.

"Follow it," Branson snapped at the police driver. "And don't be seen tailing it even if you have to kill your lights. Lose him and I'll kick you off the force!"

The driver did not lose his quarry, though it was difficult keeping track through main streets and intersections, but at last they drew clear of the city and finally struck a country road. At Branson's orders the police car lights went out. Far ahead the red light over the limousine's rear license plate had become stationary.

Lloyd stared out into the night with Branson beside him.

"Nothing there, except an old house or something with all the windows dark," the inspector said.

"What did you expect—the Sphinx and the pyramids?" Lloyd asked sarcastically. "Clough probably owns the property anyway. We may find plenty. Let's go—and have your revolvers ready!"

"What about you?" Bronson asked ill-humoredly.

"My umbrella, man, my umbrella! Come on!"

They climbed out and sped swiftly in a wide detour across the dark field, presently came within range of tree-lined grounds. Thomas caught Lloyd's arm suddenly.

"Say—take a look! Two cars there—one the black sedan that tried to run us down earlier, and the other is Dr. Clayton's! Say, they must have kidnaped him in his own car! What the hell—"

"Now I *know* I am a genius," Lloyd breathed. "Definitely!"

"When you've finished telling us you're a brainy guy, maybe you'll tell us what we do next?" Branson snapped acidly. "Railings all around the place—"

"Then we climb over. After all, Branson, you said I made a monkey out of you—"

WITH surprising ease the little scientist set the example, mastered the high railing with ease and dropped down with his vast coat parachuting around him. In silence all of them gathered, then moved swiftly under the leaf-bare trees. Dimly across the drive they could see the parked unlighted bulk of Clough's now deserted limousine.

"What now?" Thomas whispered.

"REACH! Drop your guns!" snapped a heavy voice—and with a cracking of twigs and underbrush Joseph Clough came up in the starlight.

"*Drop them!*" he thundered, as there was brief hesitation.

"Better take it easy, Clough—" Branson started saying, but the financier cut him short.

"Dr. Lloyd, you'll find a well three yards from where you are standing. Move to it, and descend into it. And don't get any original ideas!"

The little scientist said nothing. He moved forward slowly with arms and umbrella raised, finally found the well referred to. Clough flashed a torch onto well-cleaned steel footrests.

"Down—the lot of you!" he barked.

Devoid of weapons there was nothing else to do. The well ended in a short tunnel, obviously some long disused sewer from the house. At the end of the tunnel a door was half open, from which gushed white light, clearly electricity.

"Go on—into the laboratory," Clough ordered.

The party obeyed, marched forward into the white-lit expanse. Another armed figure came quietly from behind the door and said briefly,

"You can lower your hands, but don't try anything."

That voice seemed to smash the whole laborious investigation to pieces, for it was not the voice of Professor Eliman; not even the voice of Dr. Clayton.

It was the voice of Beryl!

INVOLUNTARILY Rex Thomas swung around to reassure his ears. The others turned more slowly. Without doubt it was the girl who faced them, but her features were changed—they were cold, hard, merciless.

"Beryl!" Thomas whispered, astounded. "What on earth are you up to? How did you get here?"

"Not much of a miracle, is it?" she asked tartly. "You master minds spent *your* time following Mr. Clough."

"Your car outside—the Clayton car, anyway," Rex Thomas breathed. "Of course! But, Beryl—"

"Shut up!" she retorted. "I'll do the talking here."

She moved to the door and shut it, stood beside Clough as he too held his revolver steady.

"So the great Dr. Brutus Lloyd walks right into a trap, eh?" Beryl asked cynically.

Lloyd smiled urbanely, tracing designs on the concrete floor with the ferrule of his umbrella.

"This—this is the laboratory I saw!" Thomas exclaimed suddenly, gazing around. "Sure—there are the chairs with the helmets—six of them! But only *five* scientists— Beryl, what does this all mean?"

"The sixth chair is reserved for Brutus Lloyd here," the girl said coldly. "Probably be a seventh for you, Rex. Even an eighth for Professor Eliman, whom I left until last because he is a dangerous man to handle."

"You— *You* are the brains behind all this!" Thomas stared in dawning horror.

The girl nodded, her eyes frigid. She gazed at Lloyd suddenly.

"You might as well know how far wrong you went, Dr. Lloyd," she said briefly. "I knew my stepfather's formula for synthesis from the moment he invented it. I wanted to get at that valuable material on the moon as much as Clough here did. My stepfather was too conservative. Clough and I got together and decided on a plan.

"I KNEW, from what my stepfather had told me at different times, that the pooling of several brains can per-

form what an individual brain can not. It was necessary to work out the scientific details. Simple enough, with the run of my stepfather's laboratory.

"Brains give forth vibrations.* You see that electromagnetic instrument over there? When all the scientists are placed in those chairs and vibratory helmets are put on their shaven heads, electric probes go to the seat of their brains.

"They are powerless to move—the whole nervous system is paralyzed—and their individual will is also blanketed by a negative current. Therefore they give up their every scientific brain vibration, which is electrically amplified and recorded in what might be called the brainpan—that circular copper disk."

"Diabolical!" whispered Thomas. "I've never heard of anything so fiendish!" Beryl's grin was coldly mocking.

"The copper disk gathers all these vibrations into a composite whole—a vast store of individual knowledges made collective," the girl went on, obviously reveling in her scientific achievement. "By wearing a vibratory helmet myself, connected to the brainpan afterward, my brain is able to absorb what has gone into it.

"Hence, space travel can be conquered as a start. Vast gold claims can be registered. Between us, Clough and I intend to start a scientific dynasty of our own."

"In other words, you murdered all the scientists in order to get their knowledge?" Branson demanded.

"No—they are unhurt, but they cannot return because they will give me away. They can be used later—"

The girl smiled grimly. "Your brain, Dr. Lloyd, will be worth having."

The little scientist bowed coolly but still remained silent.

"And yours, Rex," the girl went on viciously. "You're a good radio engineer; that's why I got engaged to you. I'm doing nothing wrong—only applying scientific knowledge to the problem of progress. I think my subjects get terrified—but physically they are unhurt. I was somewhat reluctant to use my stepfather too. But then, he is so clever!"

"Where is he now?" Branson snapped. "You can't get away with this, and you know it!"

"In there," Beryl said dryly, as there came a desperate hammering on an adjoining door. "Along with the four supposedly dead scientists and Clough's sculptor friend, Crandal. My dear stepfather worked from the details I supplied him, along with photographs. Nice quiet place here, and some of Clough's men are always on guard."

"Same men who tried to kill Dr. Lloyd and me tonight, I suppose!" Thomas snapped.

"Exactly." The girl twirled her revolver menacingly for a moment, then she said briefly,

"As a detective, Dr. Lloyd, you disappoint me! When you telephoned

* Science has long held the theory that thought s electrical in nature, and that the human brain gives forth vibrations which could be detected, picked up, and amplified by mechanical means, if we but knew what method to employ. However, it is certain that any vibrations the brain emanates are so delicate, that any instrument sensitive enough to pick them up would need to be very sensitive indeed. This isn't impossible, however, because astronomers have instruments capable of measuring the heat of a star light-years away, or the heat of a candle (if one were there) on the moon's surface, 240,000 miles away. Electrical instruments have been devised by G. E., capable of registering one billionth of a volt, or of registering the electrical charge in a cat's fur, and similar delicate reactions. The instruments mentioned here are not impossible, and perhaps the day is not far off when the electrical vibrations of the human brain may be trapped by a new type detector and made audible, or recorded indelibly on recording tapes. The inference of this is tremendous, because here indeed would we have the perfect lie detector. No thought could escape such a machine.—Ed.

Clough tonight, I had of course phoned him in between and told him what to expect. He answered according to my directions.

"I decided to let you come this far, so that I could use you without having to burden Clough with more kidnaping work, which is difficult and dangerous. In any case, your voice would have given you away. It is hardly like mine!"

"Alas!" Lloyd sighed, shrugging.

"What caused the trouble at my home tonight was the accidental discovery of the body in the laboratory by Parker," the girl finished. "To keep up appearances I had to let Parker summon the police."

"I'LL raise hell over that bungling," Clough growled. "Leave it to me, Beryl."

"*Varium et mutabile semper femina* —ever a fickle and changeable thing is woman," Lloyd commented sadly. "And to think that *I* of all people should *—do this!"* he finished abruptly; and before anybody present had the least chance to fathom his action, he whirled his umbrella around with tremendous force, spurting a fine choking spray from the umbrella tip.

In an instant Beryl and Clough fired their revolvers helplessly, but the shots went wide. Gasping, choking for air, they dropped to the floor.

"I'm blind!" Beryl screamed, clawing at her face. "You fiend! You devil!"

Clough was too full of coughing to speak. Inspector Branson hauled him to his feet, clapped the bracelets on his wrists. Without ceremony he did the same to the girl. She stood quivering with fury and fright, drenched in spray, her eyes roving wildly.

"Don't worry, you'll both see all right in an hour," Lloyd commented briefly. "Weak solution of an acid I invented myself. Quite a lot in this umbrella shaft— All right, you men, get that door open."

The connecting door was unbolted immediately, and out of it trooped four haggard, totally bald men. Behind them came weary Dr. Clayton and the small, foxy figure of Crandal, the sculptor.

"Brian!" Rex Thomas shouted hoarsely, clutching the foremost man. "Brian, it's you!"

Brian Thomas nodded slightly, obviously too exhausted for words.

Clayton stopped in front of Lloyd and said quietly:

"I always suspected—but I never quite *knew."* He looked at the now passive, haggard girl unhappily. "It was because of her that I refused to proceed with ideas that might have fostered criminal notions in her brain."

"You don't have to tell me," Lloyd murmured. "I'm only too well aware of it."

"But you suspected Professor Eliman!" Branson cried. "You said so!"

Lloyd gave his insolent smile. "I stand as a supreme brain, Branson—a specialist. I gathered the following points: A—Beryl was not at ease when I purposely mentioned her real last name—Kimberley; B—Professor Eliman, had he been the culprit, would never have lifted scalpels from Dr. Clayton's laboratory, therefore the only other person was Beryl.

"C—Beryl was not even shocked when I slashed a finger off an apparent corpse of Dr. Clayton, where a normal girl would have gone weak in the knees; D—she had the chance to know everything her stepfather had ever planned or invented; E—she deliberately tried to substantiate my purposely false accusation of Professor Eliman.

"Lastly—F, her mother, Janet Kimberley, went to the State Penitentiary for murder in the first degree. Commuted to life sentence. Sorry, Clayton,

but it's true."

"Yes—it's true," Clayton muttered.

"It was possible the girl might have carried on the same trend in a more modern way," Lloyd went on. "In various ways, besides those I have pointed out, she proved it. I purposely threw her off her guard so that I could see where the victims had gone. So, Branson, don't ever dare to question my genius again!"

Inspector Branson was staring blankly. "Hell, I don't know where you picked up all that!"

"I GAVE you a broad hint when I mentioned Beryl's mother. You could have traced her record from police records. I did—spent a whole afternoon doing it, though I'd known the relationship for some time. You, Clayton, married Janet Kimberley when Beryl was three, and thus became her stepfather. To save her daughter, who had taken your name, Janet Kimberley never revealed her own name was Clayton. Right?"

"Right," Clayton nodded. "That, I fancy, was the only decent spark Janet ever had."

There was a brief silence, then Dr. Brutus Lloyd pushed his Derby in place and reset his umbrella.

"Tough luck, Mr. Thomas," he said, not unkindly. "But you're young—you'll find another girl." Then he turned to glare at Inspector Branson.

"Well, what are you waiting for? Let's go! And next time you're in a mess, remember me—*magnum in parvo*, my friend—a great deal in a little space!"

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FISH MEN OF VENUS

Manny Carter fled from the planet where he was a hunted man, but a shipwreck in space brought him back—to an incredible undersea plot of the fish men

Recognition leaped into Eileen's eyes as she saw the man on the floor. "Dad!" she screamed in horror

By DAVID WRIGHT O'BRIEN

"DON'T move!" Manny Carter's heart went cold at the sound of the voice behind him. There was a sudden sickness in the pit of his stomach. Slowly, he turned.

On the promenade deck of the space liner "Asteroid" there had been nothing but silence and darkness—silence penetrated only by the half-hum of the percussion room deep in the bowels of the ship, and darkness broken only by occasional meteoric splashes of flame coming from the void surrounding the liner.

Crouching there on the promenade deck Manny Carter had been aware of the silence, and grateful for the darkness surrounding him. He had been waiting for this moment, waiting in his tiny cabin until he was sure that the other passengers had all retired. He'd given them two extra hours of grace—there wasn't any sense in taking chances—and as he'd moved silently across the aluminum deck planking he'd breathed a silent prayer of supplication. If he could only reach the lifeship hanging from the rail davits—but now . . .

"Up with your hands, Carter!" Automatically Manny obeyed the command of the short gray-haired man who confronted him.

His eyes fixed in fascination on the vibrator-pistol pointed unwaveringly at

his middle, but he remained silent.

"I had a hunch," his captor was saying, "that you'd slip aboard the *'Asteroid.'* And I also had a hunch that you'd try to make a break for it in a space lifeship. It's all over, Carter. You're nabbed. I arrest you in—."

The sentence was left uncompleted, for Manny Carter, watching his chance with a timing born of desperation, crashed down on his captor's head with a fire extinguisher from the wall. With the slightest of sighs the older man crumpled to the deck, his vibrator-pistol ringing hollowly as it slid from his limp grasp to the aluminum planking.

For an instant, Manny stood motionless above the unconscious form of his victim. Then, swiftly he stooped to retrieve the vibrator-pistol, stuffed it inside his belt lining, and waited. A second later Carter had the pistol once more in his hand and was facing the companionway entrance on his right. Someone was coming up the companionway to the deck. If he was seen—. But it was too late to try to make it in the lifeship, and he had no time to conceal the body of the man at his feet. So Manny Carter ran his tongue along dry lips and pointed the muzzle of his weapon at the entrance.

His exclamation, as the intruder came through the entrance and onto the deck, was involuntary, horror-stricken.

"Eileen!"

The girl, recognizing him, was equally astonished, but there was pleasure in her eyes, in the tone of her voice as she spoke. "Manny! Well if this isn't something! I didn't know you were aboard. I thought—." Her voice stopped as though suddenly frozen, and she stood staring at the gray haired man at Carter's feet, at the vibrator-pistol in the young man's hand.

"Manny," there was sudden terror in her voice now, "Manny, what's wrong, what's happened?" Then she gasped in anguished bewilderment as recognition leaped into her eyes—recognition of the gray-haired man sprawled inertly on the deck. "It's Dad!"

MANNY CARTER had been standing dazed from the moment of his first involuntary cry. And now, as he watched the bewilderment, the terrified suspicion growing in the gray eyes of the ethereal, auburn-haired girl before him, he found himself paralyzed for speech. He gulped futilely as Eileen Dodge, the girl he loved, dropped to her knees beside the man he'd just smashed to the deck. The little gray-haired man who tried to arrest him—Alson Dodge, her father! What a ghastly trick of fate.

His voice, when he finally spoke, was husky with the torrent of emotion he felt. "Eileen, he— he's not hurt badly. I—had to do it, please understand me. I was forced to— it was my only chance."

Alson Dodge moaned faintly, moving his head uneasily in his daughter's arms. Eyes flashing, Eileen turned to Carter. "I didn't know it was you. He hadn't told me." She bit her lip. "He probably wanted to spare me the knowledge that the murderer he was after was you!" Her eyes blazed accusingly but with infinite hurt at Carter. *"You—"* she repeated in stricken tones, *"the murderer my father was trailing!* No wonder you didn't meet us when the liner left Venus. No wonder Dad was unwilling to say anything when I asked him why you hadn't come to see us off." Her voice was shaking, almost sobbing. "Manny, Manny how could you have done this to us—to me!"

Dumbly, Carter tried to speak. The hate and grief that suddenly welled in the girl's eyes, however, was too much

for him. He tore his gaze from hers. How could he explain? What could he say that she would believe?

She had known her father's mission—to track down the murderer of Bramm. But Alson Dodge had spared his daughter the knowledge that he suspected her fiance of the crime. Now—tragically—Eileen Dodge had stepped into a panorama that mere words could never explain away. A scene that would do more to convince her of Manny Carter's guilt than any indictment in the world!

Manny Carter started to speak. He was determined that, in spite of the incriminating evidence surrounding him, Eileen Dodge would learn the truth. He didn't expect her to believe him—but he had to try to make her understand. His brain was framing the words, "Eileen, please understand me, don't think what you're thinking without giving me a chance to explain. Don't—." He was framing the phrase, when hell—deafeningly and blindingly—broke forth in the bowels of the gigantic space liner.

The alarm bell rang almost simultaneously with the ear-splitting explosion that roared up from the engine room, through the corridors, and out onto the decks of the *Asteroid.* But Manny Carter didn't hear the bell. Knocked off balance by the rending explosion, he was thrown heavily into a lurching sprawl. He didn't hear anything after his head smashed against a bulkhead plate . . .

LATER, he had no idea how much later, Manny Carter regained consciousness. There were voices around him, excited voices. It wasn't until he tried to rise that Carter realized he was shackled. Then, through a haze of throbbing pain, he looked dazedly about at his surroundings.

He was lying on the floor of one of the *Asteroid's* lifeships, and standing within his vision were Eileen Dodge, two strangers, Alson Dodge, the uniformed captain of the *Asteroid,* and a good-natured, pleasant looking fellow who was gazing intently at him.

"He's come around," said the pleasant passenger.

Alson Dodge crossed to his side and stood above him. There was anger in the gray-haired man's eyes. But before he could speak, Carter addressed him. "What is this? What's happened?" he managed to blurt.

"You're in custody, Carter," replied Alson Dodge, "and you won't be eluding me this time. We're aboard a lifeship of the *Asteroid.* There was an explosion in the percussion tubes of the engine room. It set the liner ablaze. We managed to get clear in the lifeships. You can thank Eileen that your hide was saved—for the present. She dragged you into the lifeship while the crew and passengers were abandoning the vessel."

"But where—?" Carter started.

"We're some two thousand miles above Venus, and we're going down. Once this business is over I'm turning you in to the authorities. You're charged with the murder of Prince Bramm." He shook his head soberly. "And I don't envy you when you face trial for killing a Venusian Prince!"

"But I didn't, I swear—"

"Do you expect anyone to believe that?" Alson Dodge cut him short coldly.

The two passengers, a man and his wife, stared at Manny with ill-concealed curiosity. He met their glances, his eyes boring through them until they were forced to turn away. The Captain of the ill-fated *Asteroid,* Carter remembered his name as Sommers, scarcely gave him a second glance, giving all his concentration to the controls of the

craft. Then Manny forced himself to look in Eileen's direction, only to find that she had turned her back on him and was apparently intently interested in something outside the thick porthole of the lifeship.

"Well," Carter declared bitterly, "this seems to be some little party." He spoke directly to the calm, good-natured fellow who, of all the passengers in the craft, was the only one still watching him.

"I'm sorry," the sympathetic man said quietly, "that it had to turn out like this, Manny." Even as he spoke, his left eyelid closed in a significant wink, observed only by Carter.

Suddenly Carter felt renewed courage. Chambers, Dan Chambers, the chap with the calmness, was still willing to help him. Carter knew that Chambers would aid him again as he did the first time. In spite of his despondency, Manny Carter managed an answering wink to Dan Chambers.

For Dan Chambers, his ex-boss, was one person who believed in him. It had been Chambers who aided Manny in getting secretly aboard the *Asteroid*. It had been Chambers who helped him make his escape from the Venusian authorities. Chambers was for him, and the thought was more than consoling to Manny Carter.

FOR the next several hours the passengers aboard the tiny lifeship paid no more attention to Manny Carter. And lying there in the corner of the craft, the shackled young prisoner had time for a great deal of thinking. He devoted it to a review of his plight and the steps that led him to his present situation.

Everything had been splendid with Carter, until the last two days. Sub-Administrator of Trade for the Earth Council, Manny Carter had worked hard and faithfully at his post on Twenty,* the solitary land dot on the face of the watery planet Venus.

The Venusians, creatures half-human and half-fish, carried on an extensive pearl trade with Earth. The island Twenty had been the base for these dealings, for it provided a livable spot for the earthmen during the pearling transactions with the Fish Men of Venus.

Since the Fish Men were unable to live on Twenty—it being above water and out of their natural environment—they had delegated one of their number, Prince Bramm, to act as their representative to the earthmen on Twenty. This was made possible by the construction of a water palace on the island. Here Prince Bramm had been able to live in comfort while supervising the pearl trading between his people and the earthmen.

As Sub-Administrator of Trade, Manny Carter had many dealings with Bramm, Prince of the Fish Men. Dan Chambers, Chief-Administrator, allowed Manny to negotiate most of the smaller pearling deals. And working under Chambers, Manny had been making a name for himself. There had even been rumors that Earth Council contemplated giving him a Chief-Administrator's post on Saturn or one of the other planetary bases. Eileen Dodge and Manny planned to marry as soon as he got that promotion. The Investigator for Earth Council had hinted that the couple did not have long to wait.

Then Bramm, Prince of the Fish Men, was brutally murdered. The kindly old Venusian had been found, two mornings before, lying several hun-

* Twenty is the designation number of the Earth outpost station on Venus and is one of 31 such posts scattered throughout the solar system, for purposes of trade. Twenty is the only land area of the watery world.—Ed.

dred yards away from his water palace on Twenty—dead. The evidence showed that he had been forcibly dragged from the palace and left to drown in the air.

Evidence also showed that the leader of the Fish Men tried to crawl back to his water castle, but had suffocated before he could reach it.

Circumstances pointed to Manny Carter as the murderer. The buckle from his office-belt, bearing the initials "M.C." was found clutched in Prince Bramm's hand flaps. And Manny Carter had been the last man to see the Venusian alive.

At first Carter decided to give himself up, but Dan Chambers, who believed his somewhat younger assistant's story, convinced him that such a move would be disastrous, that Venusians would demand punishment and that Manny would be railroaded into the role of scapegoat. "The rocky road of the innocent," Chambers had said, his great, good-natured face frowning.

Chambers made the arrangements for Manny's escape aboard the liner *Asteroid* which was headed back for Earth. They had decided that Manny could leave the liner in mid-space by means of a lifeship, and find his way to safety on Earth, until Chambers, working on the case, could clear him.

But Alson Dodge, assigned to the case, had his duty to fulfill. Like it or not he had to seek out Manny Carter and place him under arrest. And Alson Dodge hadn't had the courage to tell his daughter the truth.

But now Eileen knew, and Manny was captive, headed back for Venus to stand trial for the murder of Bramm, Prince of the Fish Men. Fate, in the form of the explosion in the percussion chambers of the space liner *Asteroid,* had made that return somewhat unconventional. Seven castaways from a space liner—headed for Venus in a lifeship.

"It's a mess," Manny said bitterly to himself, "a real mess. But somehow, some way, I'm going to get out of here."

The drone of the small atomic motor at the rear of the lifeship seemed to lull Carter's anguished thoughts into a hazy panorama. He was aware of the aching throb in his head, the slowly blurring figures of the others in the lifeship. Manny Carter hadn't closed his eyes in the last forty-eight hours. But now sheer fatigue took control of his weary mind and he dozed into a troubled sleep. . . .

IT must have been the break in the muted purring of the lifeship's motor that brought Manny Carter back to consciousness. There was the sound of excited conversation coming from up forward, and as Manny turned his body this way and that in an effort to squirm to a position of vision, he noticed that the voice of Dan Chambers seemed to be the loudest, the most insistent.

". . . the most feasible move," Chambers was saying. "It's more than certain we can't force the motors much further. And the delay won't be much."

"I have more than just that to think of," Alson Dodge said gruffly. "I have a prisoner to deliver, Chambers. It's urgent that I get him to Venus as possible."

"Chambers is right, however," Captain Sommers was talking now. "It's almost positive that our atomic motors won't hold up much longer. If we can land, undoubtedly we'll be able to get assistance from whatever tribe of Fish Men are in that vicinity."

"They're right, Dad," Eileen Dodge broke in. "The delay won't be long, but it *is* necessary."

There was a murmuring of assent from the other two passengers, the mid-

dle-aged man and his wife, then Manny heard Alson Dodge clear his throat. "Good enough, Captain Sommers. If it's necessary, there isn't anything to be done about it. But please don't take any more time than is needed."

Captain Sommers' voice was terse, slightly bitter as he replied. "I don't care to take any more time than you do, Inspector Dodge. Please remember that it is as essential for me to get back to Venus as it is for yourself. Remember, man, I've lost my ship with that explosion. It's not pleasure that's waiting for me, by any means."

"Sorry, old man," Dodge said. "I'm afraid I came near forgetting that."

"How soon will we be ready, Captain?" inquired Chambers.

"We should start our dive in the next half hour," Sommers declared. "Everyone had better get ready."

Carter heard footsteps, then, and Alson Dodge approached him. He was holding a space suit in his arms, and he bent momentarily to deposit it on the floor beside Manny. Then he spoke.

"I'll have to ask you to make me a solemn promise, Carter."

Manny looked at him questioningly. "What?"

"We're going to be on Venus shortly. And since the motors won't last long enough to take us directly to Twenty, we'll have to travel underwater until we find a Venusian village where we can make repairs. It means that I'll have to remove your bonds, Carter. You'll have to put on one of these space suits when we submerge."

Manny merely nodded.

"I'll have to ask your promise not to attempt escape during that time," Dodge concluded.

"You have it," Carter answered briefly.

Wordlessly, Alson Dodge produced the keys to unlock Manny's shackles. A moment later his young prisoner stood erect, stretching his hard, cable-like muscles gratefully.

"Thanks," Carter said.

Looking around, Carter saw that most of the other passengers, with the exception of Alson Dodge, Chambers, and himself, had already climbed into their space garb and were busy adjusting the oxygen and pressure gadgets. He tried to catch Eileen's eye, but was unsuccessful. Then he sighed and began to dress himself in the spatial equipment. Once, during the dressing process, Manny noticed Chambers looking in his direction and was grateful to see his former superior give him a knowing wink which seemed to say, "Don't worry, fellow, we'll get you out of this."

Fifteen minutes later Captain Sommers cut the motors on the lifeship and turned to the passengers. "We're coming down on the water," he announced.

Eileen, her father, and the middle-aged couple grouped themselves around the thick-plated porthole to get a glimpse of the territory on which the lifeship was descending. Captain Sommers stood quietly at the controls, occasionally checking the descent instruments. Dan Chambers took this opportunity to ease closer to Carter.

"Take it easy, Manny. I still believe in you, kid. The game isn't over by a long shot," he said softly. "I know the territory we're going down into. Once we're there, I'll see to it that you get the chance to make another break for it."

"Thanks, Dan," Carter replied. "I owe a lot to you, even if things did get messed up a bit. When I'm able to clear myself, I'll pay you back somehow."

Carter nodded swiftly, gratefully. Then an uneasy thought occurred to him. Escape? He'd given his word to Alson Dodge that he wouldn't try to escape again. Not, at any rate, until

the lifeship was once more on its way to Twenty.

"Nonsense," Carter told himself sharply. "What in the Hell has my word got to do with this? Did they believe me when I protested my innocence? My say so isn't going to result in a trial for a murder I didn't commit!"

Chambers had joined the group at the porthole, and Carter, preferring to stay where he was, sat down on one of the benches lining the wall of the craft, turning his attention to Captain Sommers' skillful handling of the landing.

With the most imperceptible of jars, the tiny lifeship settled on the water. Killing the atomic motors entirely, Captain Sommers turned to the passengers.

"Very well," he said. "We're safely on Venus. We dive below water in five minutes. I'd advise you all to put on your space helmets before we go down."

Silently, the group obeyed Sommers' command. Then, after what seemed to be an eternity of preliminary gauge-testing, the white-haired ex-captain of the *Asteroid* faced the passengers of the lifeship once again.

"Ready," he said briefly.

The nose of the tiny craft seemed suddenly to go leaden, as if pushed front-end-over by a gigantic hand. There was the faint sound of the pressure gauges whistling, the lights in the small cabin flickered for but an instant, then, except for an imperceptible sloping of the floor, everything seemed to return to normality.

"How long will it be until we find a Venusian village?" Alson Dodge asked the Captain.

"Not long, not long at all," Sommers reassured him. "If the directions Mr. Chambers has given me are correct, we are almost within vibration wave of one of them now."

Carter saw Alson Dodge turn to Chambers. "You know the Venusian territory well, Chambers?" There seemed to be the slightest hint of a challenge in his voice.

Carter cursed himself for not having adjusted the ear-phones inside his helmet to a general auditory vibration for, although he had been able to hear Sommers speaking to Dodge, and Dodge's reply, he failed to pick up Chambers' answer to the old man's question. Quickly, Carter flicked the adjuster button on his suit to a general frequency pick-up. He came in on the tail end of the handsome good-natured Administrator's reply. ". . . after all, it's my job, y'know," Chambers finished.

DURING the minutes that followed, Manny Carter centered his attention on Eileen Dodge. Wistfully, he forced himself to follow her with his eyes as she moved back and forth in front of the instrument panels at the nose of the lifeship. Once he thought for an instant that she stole a glance in his direction. But if she had, she forced herself to turn coldly away, as if she had permitted herself to look at something quite distasteful very much by accident.

"God," Carter thought to himself, "she looks lovely even in that clumsy, cumbersome space suit."

Through the glass turret-like helmet, the lights seemed to slant sunnily down on her beautifully red hair, giving it an almost halo-like sheen. This last mental comparison was too much for Manny Carter, and for the first time in the last forty-eight hours he choked back a lump that rose swiftly to his throat. During the past hours he had been trying not to think of Eileen Dodge and all the things her loss meant to him. It was more than he could stand. The girl he loved—the girl who had once loved him—certain that he was a mur-

derer!

At that moment Manny Carter was never firmer in the conviction that he couldn't die, couldn't let himself be railroaded into a final punishment for a crime he hadn't committed. His lean, tanned young jaw set firmly and his square, hard fists knotted and unknotted themselves at the thought of the rank injustice of his plight. But Manny Carter wasn't feeling any schoolboyish emotion of self-pity. Instead he felt rage, hot burning rage and determination to right the wrongs he had suffered.

"I'll show them," he muttered half-aloud. "I'll show them all, damn it." Then he flushed, for simultaneously all heads of the other passengers in the cabin turned in his direction. Manny realized that they had all picked up his muttered challenge through their helmet ear-phones.

IT couldn't have been more than several hours later when Captain Sommers turned to the group in the lifeship with the announcement: "There's a village directly ahead of us. Fish Men are already coming toward the lifeship. We'll find a mooring spot in the next five minutes."

Dan Chambers smiled. "I told you that we'd find a village if you followed my directions," he said easily. "This is probably Maeku, a village I've contacted on pearling business on several occasions."

Suddenly Carter became alert. He couldn't remember, from any previous knowledge, of ever having seen any transactions closed in the Administrative offices on Twenty that involved Maeku. As a matter of fact, he seemed to recall that Maeku was charted as one of the Venusian sections that were completely unproductive insofar as pearling was concerned. He felt himself grow tense within. Chambers' plan for his escape was beginning to materialize.

But Carter didn't have time for further surmises. Alson Dodge crossed to where he stood, and placing one hand on his arm the gray-haired interplanetary investigator spoke with an air of firm decision.

"I'll have to ask you to keep constantly in my sight, Carter," Dodge declared quietly. "You understand, of course. You've already made one break for it and I can't risk another." Then he addressed Dan Chambers who stood expectantly in front of the steel air-lock door at the nose of the ship. "I wish you'd take care of my daughter, Chambers. I don't want to take any chances on something going haywire with these Fish Men. After what's happened to their Prince on Twenty, they might be stirred up a bit."

"Be glad to," smiled Chambers, "if Eileen doesn't mind. But I don't think we've much to worry about insofar as the Venusians are concerned. They're a peaceable people. I don't think they mean to harm us."

Then Captain Sommers flooded the tiny cabin with sufficient air pressure to keep out the sea that enveloped the little lifeship. The door was thrown open in the next moment, and the little band of castaways from the liner *Asteroid* stepped forth into the dimly-lighted streets of the strange Venusian undersea village.

A WELCOMING committee of Fish Men had grouped about the tiny lifeship. As Carter looked swiftly through their ranks he felt a sharp, unexplainable sense of distrust. There was something written in their wide disc-like eyes and flat faces that made him uneasy. Then Dan Chambers took charge of the situation as the others looked on with an air of expectancy.

"Where," he demanded in the Venusian dialect, "is your leader?"*

THERE was a commotion in the ranks of the Fish Men, and they parted to permit a huge, malevolent looking Venusian to move to where Chambers was standing. He was the same as the thousands of Fish Men Carter had grown used to in his services as Sub-Administrator on Twenty, and yet he wasn't. There was something different about him, and Manny Carter searched his mind to discover what that something was. Except for his unusal size—most Venusians were of short stature—the leader of this particular village didn't seem different. But still there was something. . . . Carter gave it up as Dan Chambers addressed the creature.

"We have c o m e from Twenty," Chambers was saying, "our great ship was destroyed. And now we must return to Twenty. We wish to make repairs in your village."

The huge Fish Man spoke in Venusian, gill-like mouth opened and sending tiny air bubbles up through the water with each syllable. "We are glad to offer ourselves to your service. State your wishes and I shall see that they are carried out even as commands."

Captain Sommers had been listening intently to the interchange of conversation, and now he broke in on Chambers and the Fish Man. "It will be necessary for us to have our lifeship raised several yards off the ocean bed. If this can be done by your men, I will appreciate it."

The Fish Man merely nodded. Then, turning to Chambers he spoke. "My name is Atar, I lead the villagers of Maeku. Would the other visitors care to rest inside our shell huts while the repairs are being made on the vessel?"

Chambers turned to Alson Dodge, who had been silently standing beside him. "How about it? I think it might be a good idea."

"Very well," Dodge replied. Then he gestured to Eileen. "Go on ahead with Chambers, dear. I'll follow in a moment."

As Chambers, taking Eileen by the arm, followed the beckoning hand flaps of the huge Fish Man, Atar, Carter heard him laugh. "Don't look so frightened. These people are harmless, once you get used to seeing so many of them hanging around."

The middle-aged married passengers —Carter had learned their names to be Mr. and Mrs. Foswin—followed swiftly behind Chambers and Eileen, as if they were frightened by the idea of being left alone in the strange undersea village.

Then Alson Dodge stood in front of his prisoner. "Come on, Carter," he said. "I want you to stay very much in my sight while the repairs are being made."

The shell huts which Atar, the village leader had mentioned, were actually extremely well constructed dwellings. With the exception of the furniture and accessories, meant for undersea life, they rivaled some of the finest earth dwellings Manny Carter had ever seen.

The hut, a huge building of solid shell construction, into which the passengers of the lifeship were led was spacious and comfortable—if any undersea buildings could have been comfortable to land beings.

*It is a well known fact that sound waves carry much better in water than they do in air. Anyone who has pounded two stones together on the bottom of a swimming pool will readily agree that this is a fact. Sound waves, indeed, carry much further in atmosphere, when that atmosphere is saturated with moisture, such as fog, or mist. Thus, when Chambers addressed the Venusian, he was certain that the Fish Man would hear him. The sound waves carried through his helmet, into the water, and quite as effectively as in atmosphere.—Ed.

While Captain Sommers and Alson Dodge talked quietly with Atar the Fish Man, Carter silently pondered over the strange premonitions he felt concerning the village. He looked up, now and then, to see Dan Chambers talking casually, charmingly, to Eileen.

Atar disappeared, finally, with Captain Sommers, evidently to give directions to his villagers in connection with the repair of the ship. The middle-aged Foswins went along with them, undoubtedly curious about their odd surroundings. Minutes lapsed into an hour, then two. Alson Dodge, growing uneasy, began a restless pacing. Dan Chambers, however, appeared unperturbed by the delay of Captain Sommers and the Foswins.

Manny Carter was looking pensively at the bright carboncade bulbs* that provided an almost daylight illumination for their underwater surroundings. Then, as if on a swiftly given signal, their glare faded into nothingness, leaving everything in pitchy, inky blackness!

IT was all so sudden, one instant there had been light, and the next moment nothing but impenetrable darkness. Alson Dodge had been the first to cry out. Then Carter heard a startled scream of terror from Eileen. Dan Chambers' voice, speaking swiftly, reassuringly, came to Carter through his headphones.

"It's all right. Everything is all right. Don't get excited. Must have been a voltage transference in repairing the lifeship. Follow the illumination of my torch. I'll lead you out of here."

*These Venusian carboncade lamps probably consist of a type of carbide-gas burner, evacuated of water, with a tiny vent for escape of fumes, and for admitting a constant supply of water to the carbide to form the gases. These burn with a brilliant illumination, until the escape vents are shut off, when collecting fumes quickly extinguish the flames through lack of oxygen.—Ed.

There was a flickering, then an undersea torch blazed in the corner where Dan Chambers stood last. It wasn't strong enough to provide any more light than was necessary to carry its own radiance. But Chambers was evidently waving it back and forth in a beckoning signal. Then it moved ghostily in the direction of the nearest door.

Carter was starting out after the torch when a hand seized his arm. Startled, he wrenched himself free, stepping back a pace. Then, before he could prevent it, a hand reached forth to spin the communication dial on his chest plate to "short reception." In the next moment he heard Chambers' voice, calm and collected.

"Take it easy, Manny, this is your chance for a break. It's all been staged for your benefit, kid. The torch that Dodge and his daughter are following is held by one of the Fish Men. Sommers and the Foswins are being held. The lifeship's been juiced up to give you a chance for escape. I'll be able to explain it all to them, once you're free."

Something made Manny Carter hesitate for the briefest of seconds. Could it have been his promise to Alson Dodge? Or was it— Then it was past, and Carter remembered the penalty that awaited him if he was taken back to Twenty, remembered the law of self-preservation over all else.

"Let's get going," he said sharply. "Lead the way, Dan."

They had covered several hundred feet through the tangled mass of seaweed that engulfed them knee-deep at the rear exit of the shell hut. Through the murky half-light surrounding them, Carter was now able to make out the outlines of the lifeship, evidently held in readiness for his escape. Suddenly he stopped, turning about to face Chambers.

"What about the girl?" he asked.

"Will any harm come to her, or to the rest of the passengers?"

"Lord, no," Chambers answered. "Manny, be quiet and keep going or you'll never make it!"

Then they were pushing swiftly through the tangled undergrowth toward the lifeship once more. Then they were at the door to the craft. Several Fish Men stood in readiness, waiting to help Carter and Chambers slide the lifeship along the ocean floor to a position where it would be free for an immediate take-off.

Carter was at the door, now, and he turned to Chambers, placing his gauntleted hand on the other man's shoulder. "Thanks, Dan." Then he was inside, heard the door slam shut behind him. He took his place at the controls of the craft, and felt it moving out from the tangle of seaweed under the guidance of Chambers and the Fish Men. Carter saw that he was clear, with a straight stretch of ocean floor ahead of him. Through the thick paned window at his right he could see Chambers' grotesquely space-suited figure moving out of range followed by the naturally weird forms of the Fish Men. He reached for the throttle switch, his hand just a trifle hesitant.

A moment later the atomic motors sparked into crackling vibration and the lifeship was speeding down the open stretch of sea bed to safety.

"To safety," Manny muttered to himself perhaps a half hour later. "And what in the hell is it going to get me?" He had decided to remain undersea for the first part of his flight, pointing the nose of the lifeship in counter-direction to Twenty.

Now, all at once Manny Carter's hard young jaw went slack. A swift, sickening doubt, the culmination of all his previous vague suspicions, crashed in on his mind. The Fish Men at the village of Maeku—too late he realized what he remembered about them!

"No," Carter told himself savagely. "It can't be. I'm acting like a fool. It's just my crazy imagination, my rotten memory. It can't be!" But in spite of his words, in spite of the almost overpowering instinct for self-preservation, Carter threw the controls of the lifeship savagely about, heading back in the direction of Eileen Dodge, Dan Chambers, and the odd Fish Men of Maeku!

THE distance Manny Carter covered in flight seemed doubled, now that he was returning once more to Maeku. Doubled, no doubt, because of the fact that, in flight, Carter had worried only for himself. But now his frown of anxiety was caused by an unpleasant mental picture of Eileen Dodge, her father, Sommers, and the two unsuspecting Foswins. Carter knew what they must be facing.

"I've been a chump," Carter groaned aloud, "pray God I haven't been a chump too long!"

It was simple, so awfully simple that Carter cursed himself for not having suspected it at the start. The Venusian village of Maeku had been the first positive indication. Chambers spoke of having had pearl dealings with the villagers. There were no pearls within a thousand sea miles of Maeku. It was included in the blocked, unproductive squares that Carter had charted on his earth reports from Twenty.

Nor was that the only ominous part. Atar, leader of the Maeku villagers, had aroused Carter's suspicion. And now he knew why, for the huge Fish Man, identical to other Venusians in almost all respects, bore the outcast brand of Venus. On his back, where there should have been the black, sleek fin that was part of the anatomical structure of the ordinary Venusian,

there was instead—the jagged, gray, menacing fin of the killer shark!

There was no doubt in Carter's mind whatsoever. Atar and his Maeku Fish Men were the Venusian renegades who had never been seen by Earthmen, but whose existence had often been testified to by brutal undersea pearl pirating. Manny remembered the venerable Prince Bramm speaking of the outcast tribes of Venus, of their desire to drive earth people from the face of the watery planet and seize control of the pearling trades. And Chambers, Dan Chambers, had been dealing with them!

"It was smooth," Manny muttered, smashing his knee sideways against the accelerator bar, "too damned smooth! Chambers had Bramm murdered and convinced me to take flight, so it would look absolutely certain that I was guilty. He didn't want me to give myself up, not until he had had his chance to organize the renegades and gain control of Venus. Then he would have been in a perfect spot. Dictator of Venus. If Earth wanted any more pearls,* they'd deal with Chambers and his pirates, or not at all!"

But what of the explosion aboard the *Asteroid?* Manny's brow wrinkled in perplexity. Was it sheer accident? It was too well done, too expertly timed to have been a thing of chance. The *Asteroid* was the only space liner traveling between Venus and Earth. Its destruction meant that actual communication—other than radio, that is—between Earth and Venus would have been cut off for at least three weeks. And in three weeks Chambers would have time to sweep the planet clean of anyone standing in the way of his monstrous scheme!

Of course! It could only be Chambers! He was the only man who could have engineered any crooked work on Twenty. He was present when Bramm was killed—at least he was on the island. He was on the ship when the mysterious explosion—not so mysterious now!—had wrecked the liner. He was on the scene to direct the lifeboat to the right spot to be picked up by his own cohorts. And now, he was allowing Carter to escape, so that if anything did go wrong, Carter would be the goat. Clever, that man!

DAN CHAMBERS, pleasant, good-natured, calm Dan Chambers, the one man on Venus Carter thought to be trustworthy, loyal. Why, Chambers would have taken his— Manny Carter's face went deathly white at the last unspoken thought. Why not? Why wouldn't Chambers have figured on that as well? Eileen was attractive. Chambers had expressed his admiration of Carter's fiancee countless times—under the guise of friendly admiration. Suddenly Chambers' actions toward Eileen Dodge became obvious, horribly obvious, to Manny Carter!

Face taut, hands clenching the controls of the lifeship in a vise-like grip of desperation, Manny Carter breathed a silent supplication that he had not been too late in his discovery, that he hadn't played the fool too long and thus thrown away his one chance.

*Although on Earth synthetic pearls of great beauty are easily created, and natural pearls are abundant, Venusian pearls are vastly different. Properly, they are not pearls at all, although they are a formation built up by a small deep-sea fish. Rather than being opaque, as are Earth pearls, whose lustre is a surface quality, which breaks up the light into the delicate colors of mother-of-pearl, they are fully transparent, and rather lack-lustre until warmed to body or near body temperature. Then they burst into vari-colored flame that seems to flow through them like liquid fire, to ebb and flow even outside the surface of the pearl to a distance of sometimes as much as a half-inch, as though the colors were escaping from the pearl itself. They possess a fascinating loveliness that is equalled by no other gem on either Earth or Venus. Even Martian rubies cannot match them for display purposes.—Ed.

EVERY second seemed several eternities, as the tiny craft split its way through the murky green depths. And Carter, peering with anguished impatience at the indicator gauges on the control board in front of him, tried to move the little lifeship forward and faster, forward and faster, by sheer willpower.

Time became a dull, gray, agonizing blot in Carter's mind. It seemed to him as if he had been sitting there at the controls for endless centuries. The throttles on the motor ranges had been opened wide, and the atomic engines were crackling with a furious, hysterical, hell-driven whine. Tiny beads of sweat formed on Carter's bronzed forehead, trickling down the bridge of his nose, clouding his eyes with their salty sting. He brushed them away when he thought of it, but most of the time he gazed fearfully at the pressure gauges, praying huskily that the motors would not give out, would continue to crackle onward under the driving fear that his throttle hand imparted to them.

So intent was Carter, so agonized, unseeing was his concentration, that at first he didn't notice the blot of light in the distance. But then, when the glowing aura registered itself in his brain, growing larger and larger as the lifeship approached, he reached swiftly to the throttle cut-off, and almost immediately the atomic motors gratefully subsided into a faint humming sputter. Maeku was just ahead!

As he eased the ship slowly forward, Manny Carter's mind went through a series of desperate calculations, seizing schemes and then discarding them, realizing odds and then ignoring them, for until this moment he hadn't given thought to a plan of action.

One thing seemed fairly certain. He couldn't barge right into the village, announcing his presence to everyone and anyone. It was also true that, should he leave the lifeship and proceed to Maeku on foot, he would need some sort of a weapon with which to defend himself. Carter eased the lifeship to a complete stop.

Climbing stiffly from the control seat, he walked to the rear of the tiny craft and began a thorough search for something which would serve as a weapon. "Or," Carter thought bitterly to himself, "a reasonable facsimile."

Moments were wasted as Carter tore through every possible cache for a weapon. Storage lockers revealed nothing, niches beneath the emergency caches were also empty. He was perspiring freely from the frantic search.

"To hell with it," he thought desperately, "there's no more time to waste." He was starting toward the air-lock door and was throwing open its release, when the object caught his eye. It had been placed in an unnoticed holder above the door itself—an automatic type atomic arc torch, the kind used to cut through metal in emergencies that might occur aboard the craft. It was capable of working under water, or in any sort of pressure conditioning. Meant for a tool, it was not, however, too clumsy to be used as a weapon. As a matter of fact, the handle of the atomic torch was fashioned in much the same manner as the butt-end of a vibrator-pistol.

"It's something," Carter muttered grimly, "and it's going to have to work." Swiftly he tore the torch from its holder, pressed down on the air-lock door release, and stepped out into the undersea jungle.

He switched off the receptor button on the front of his space suit. There would be no need for communication. Besides, Chambers was probably still garbed in spacegear, and Carter didn't want to take the chance of having him

—with his receptor adjusted to a general pick-up—hear his heavy breathing as he made his way through the undergrowth that formed a sort of jungle around the village.

IT was slow, treacherous going. And several times Carter was almost caught in the vampire-like grasp of carnivorous undersea plants that reached out toward him as he passed. He knew that, once they seized prey, the flesh-feeding fungi never released their death grasp, so his narrow escape on both occasions made his heart hammer with the excitement of the danger that surrounded him and the greater danger that lay ahead.

It was fully fifteen minutes before Carter emerged from the under water jungle and onto the edge of the clearing that encircled the Fish Man village of Maeku. For several minutes, he hesitated on the fringe of the clearing, trying to adjust his eyes to the new brilliance of the lamps of Maeku. And those minutes almost cost him his life.

He didn't hear the slithery, silent approach of his adversary, so it must have been sheer instinct that made him wheel about. And just in time—for less than four feet behind him was a shark-finned Fish Man of Maeku. In the evil. looking creature's hand-flap was clutched a two-foot long pearling dagger!

There was a sudden green swirl of bubbles as the Fish Man drove in toward Carter, knife raised high for the plunge. Carter forced himself to wait precious split-seconds, till he was positive the creature was in range of the atomic torch. He had to take the chance, for his weapon was as yet untried.

Then, as the wide, emotionless, disc-like eyes seemed almost against his very own, Manny Carter, breathing a prayer to the Gods of Combat, squeezed hard on the trigger of his atomic torch.

The Fish Man never drove his gleaming blade downward, for with a horrible, half-human gurgle, he dropped the knife, clutching in searing agony at his middle. In the instant before the creature fell, Manny Carter saw screaming anguish written in those wide, watery eyes.

A swift inspection convinced Carter that he would have no more trouble from that particular enemy. Then he rose from where he'd crouched over his fallen foe, and looked quickly about. He feared, for a moment, that the battle might have betrayed his presence to others in the village. But as seconds fled, and there was no sign of that Carter thanked his maker that the Fish Man had uttered no cry save the almost inaudible death gurgle.

As an afterthought, and an additional precaution, Carter stooped once more over the body of the renegade Venusian, picking up the pearling knife from where it had fallen beside the body. Stuffing this in his belt, Carter wet his dry lips with his tongue, and returned his attention to the shell huts of the village. Eagerly, his eyes searched along the strangely deserted street in an effort to locate the shell palace that apparently housed Atar, Fish Man chief of Maeku.

A sickening premonition assailed Manny Carter at that moment. Supposing he were too late? Supposing the apparent emptiness of Maeku meant that Chambers had already started the renegade Fish Men on their terrible mission? Then where would he find Eileen, and Sommers, and the rest of the party? Had they already been killed?

Carter was moving forward when he half-stumbled. Looking swiftly down at his feet, he gasped in numb horror. The objects he had almost tripped over were the utterly lifeless bodies of the two Foswins!

FOR a timeless, breathless period, Manny Carter stood staring horrified at the bodies before him. The middle-aged couple had been brutally, savagely, torn open by knives! Obviously the slaying had been perpetrated with the aid of the gruesome pearling weapons carried on the persons of the Maeku Fish Men.

Carter had to force himself to take his eyes from the pair, had to summon every last atom of willpower to lift his gaze from the Foswins and look elsewhere to see if the rest of the passengers had been similarly treated, murdered in cold blood.

Moving his eyes slowly around the ocean floor, Carter looked for indications of other struggles. There was a sort of relief, although but momentary, in the discovery that there had been no other struggles but the one that resulted in the brutal murder of the unfortunate Foswins.

"So the others must be still alive." Carter felt himself seized by blind ungovernable rage; rage at Chambers, futile maddening rage at what his own stupidity and trust had cost. Gone was his sense of caution, his wariness of danger. There was only one thought in Manny Carter's brain as he stepped out into the strangely silent streets of Maeku. He was going to find Eileen, and he was going to take primitive forceful vengeance on the deceptively good-natured Chambers.

Manny Carter had already killed, and he was ready, eager, to kill once more.

From shell hut to shell hut, Carter made his way along the street, opening doors, barging into empty, deserted dwelling places and rushing out again. At the end of the street stood the palace of Atar, leader of the renegade Fish Men.

In an instant, Carter was at the door. Then he was inside the lofty building, heading for the place where Atar had left them just before Chambers enabled him to escape in the lifeship.

The carboncade lights burned brightly in every room of the building. Then Carter heard voices, and he stopped, breathlessly, to listen. The voices came from a door to his right, and one of them, he recognized with a heady flush of red rage, was Dan Chambers!

Swiftly, Manny Carter crossed the narrow hall, had his hand on the door. In the next moment he stepped into a small, brightly lighted room. Turning, astounded at his entrance, were Chambers, Alson Dodge, and Eileen!

Time hung motionless as Carter had the split-second panorama stamped into his mind. Dan Chambers seemed slightly dazed, and there was a jagged gash along the arm of his space suit. On the floor beside Eileen and her father were thick hemp coils, evidently used as bonds for the pair. Eileen's face was white, terrified, making the tumbled maze of her magnificent red locks seem even more brilliant beneath her space helmet.

Alson Dodge was looking at Carter with a bewilderment that was rapidly turning to rage.

Carter switched his receptor mechanism open with a quick automatic gesture. "Carter," he heard Alson Dodge grate. "By God, you have your unholy nerve!"

Then Chambers' voice broke in: "You renegade swine, Carter. Have you come back to finish your rotten work?"

Eileen merely stared at him with an unspoken look of mingled revulsion and bewilderment. Then Carter spoke his first words. "Damn you, Chambers! I don't know what in the hell this is all about. But I finally figured out your little scheme. And you're through, Chambers. Do you understand me? I'm

going to kill you. Burn the guts out of your rotten body." His atomic torch pointed at Chambers, Carter advanced slowly across the room.

"Stop," the sudden almost hysterical command came from the lips of Eileen Dodge, and it was enough to make Carter halt momentarily. "Haven't you done enough?" the girl was saying. "Murder, revolution, greed, isn't there anything you'll stop at? Do you have to kill again? Have you gone stark, raving mad, Manny Carter?"

AT that instant it became terribly clear to Manny Carter that Chambers had once more played a trump hand. Chambers was making Eileen and her father think that he, too, was an innocent victim of Carter's ruthlessness.

That he, himself, had escaped the clutches of the Maeku Fish Men and was trying to save them.

He had undoubtedly told them that Carter's escape in the lifeship was the signal for a revolt which had been planned ever since the murder of Prince Bramm. That explained the deserted streets. The renegade Venusians were probably already on their way to surprise the peaceful Fish Men and unsuspecting earth colonists on Twenty. And Chambers, who had cleverly stayed behind, was playing his just-in-case hand. He was pinning it all on Manny Carter, and if it didn't succeed, Chambers would still emerge a hero—even in the eyes of Eileen!

Manny Carter realized, as the sweat beaded itself on his brow and trickled tauntingly down his face, that Chambers had him stopped cold. It would do no good to kill Chambers, for in the cunning brain behind that handsome face there was the only knowledge that would ever clear him. If he blasted Chambers into eternity he would have slight satisfaction, for into eternity would go, also, the evidence that could save Manny Carter and redeem him in the eyes of the world and Eileen Dodge. And Chambers, smirking sardonically in Manny's direction, was evidently quite aware of that.

"What do you intend to do with us, Carter?" Chambers was saying, and doing a beautiful bit of acting as he spoke.

The smirk on his face became slightly more evident, agonizingly irking to Carter.

"I should," said Carter levelly, "blow you to hell anyway. Just to see you die!"

Fear slid quickly across Dan Chambers' face, then vanished with Carter's next words. "But I won't. I'm going to make you talk. Somehow you're going to spit out the truth, whether you like it or not."

"You're raving, Carter. I'm more than positive that you've gone mad. Drop that atomic torch, man. Things are bad enough for you as it is, without making them any worse." Chambers was playing to a full house now, and taking devilish relish in it. He could be the heroic figure, arguing a murder-bent, raving killer out of his wildness. Oh, yes, very, very heroic. A performance that wouldn't hurt Eileen's opinion of him in the slightest. He was playing it to the hilt, even to moving over to where Carter was standing. But Carter, seeing his intention, raised the atomic torch immediately.

"Get back, Chambers. Get back, or I'll forget myself. Your plans wouldn't be worth a spark on Mars if I killed you!"

"Don't try it, Dan. He's gone mad, I tell you." The voice was Eileen's, and of all the sentences that had been spoken since Carter entered that room, hers was the one that hurt the most.

Suddenly Manny Carter knew where

his only chance lay. It was a wild, almost impossible scheme. It would be the end of things if there were any remaining Fish Men of Maeku still in the village. But it was a chance that had to be taken. And the way Manny Carter felt, he'd gamble on a Fish Man surviving an air tank at that moment.

Manny gestured with his atomic torch. "Come on," he told the trio. "The lifeship is outside where I left it. We're going out there, all of us." Wordlessly, Eileen, her father, and Chambers moved as Carter directed them. They were in the hall when Chambers turned insolently to Carter. "You're just piling it up worse for yourself, Carter. I'll give you this last chance to hand over that torch."

"Shut up," Carter snapped in reply. "Shut up and keep moving."

THEN they were once more in the streets of Maeku. And Carter held his breath as he looked up and down the carboncade lighted avenues. There was still no sign of villagers. Undoubtedly they were on their way toward Twenty. The shark-finned creature Carter had slain on entering the village must have been a lone sentry left there by Chambers. Probably at this very moment Chambers was wondering what had happened to the Fish Man.

Silently, the odd-appearing group moved through the deserted streets of the undersea village. Carter noticed the quick glance that Chambers shot to either side as they drew closer to the fringe of the undergrowth surrounding Maeku. Undoubtedly he was trying to figure out what had happened to his Fish Man sentry.

"Looking for someone, Chambers?" Carter said softly. And from the sudden, involuntary jerk in the man's back, Carter knew he'd struck home with his question. Deliberately, he herded his captives forward in the same direction that he had taken to arrive at the shell palace. They were retracing his steps, foot by foot.

Then Eileen screamed, and Carter cursed himself for not having concealed the bodies of the Foswin couple. Her father quickly stepped in front of the gruesome sight, shielding her from further view of the brutal scene, but it was too late, and Eileen fainted in Alson Dodge's arms.

"You swine," Carter heard Alson Dodge mutter, "you bloodthirsty swine, Carter!" Sickly, Carter realized that another atrocity had been attributed to his hand. But he clenched his jaws and forced himself to grate:

"Move on, even if you have to carry the girl!"

Carter was deliberately moving closer to his captives, until he was walking a scant three feet behind them. Alson Dodge was slowing up because of his added burden in Eileen. When they passed the queerly spread, pain contorted body of the Fish Man, Carter, listening sharply, heard Chambers' involuntary swift intake of breath. But that was the only sign that his enemy gave.

Then the underbrush grew deeper, until a few moments later they were in the jungle, heading for the lifeship. Manny Carter tensed his muscles in anticipation of the plan he waited for, moving even a few more inches closer on the group in front of him.

Then his chance presented itself, and moving silently, as swiftly as his muscles allowed him, directly behind Dan Chambers, Carter shoved with all his strength, bowling the unsuspecting captive off the tiny trail on which they had been traveling.

CHAMBERS' first reaction was a grunt of amazement as he tried to regain his balance, then an oath as he

realized he couldn't. His hoarse scream of utter terror came immediately with the knowledge that he was sprawling helplessly into the arms of a gigantic, flesh-feeding undersea pitcher plant of Venus!

Alson Dodge wheeled around as the cry from Chambers almost split his eardrums. He cried out in terror as he perceived what had happened. Then, dropping Eileen to the safety of the path, he started toward Chambers. But Manny Carter had anticipated as much, and his atomic torch was leveled directly at Dodge's head before the man realized it.

"Stand back," commanded Carter. "Dammit, stand back, or you'll get caught too."

"You pushed him," cried the horrified little man. "You, you pushed him!"

The agonized cries of Chambers had subsided to a low moaning whimper of babbling terror, and Carter spoke again. "Right. I pushed him. And no one's going to aid him until he comes out with the truth."

He faced Chambers, now. "Do you hear that, Chambers? I have a knife. It's your only chance to free yourself from that plant. You'll either tell the truth, or be eaten alive. Take your choice!"

There was a sickening, plucking sound, as the tentacles of the flesh-eating plant started their ripping pawing of Chambers' space suit. But Chambers was still whimpering incoherently, and sweat broke out anew on Carter's forehead as he realized that he wouldn't have the guts to let anyone — even Chambers—die under such horrible circumstances. He prayed silently to his creator for the strength to hold out longer than Chambers. Carter forced his voice to the hardness of steel.

"Chambers," he spat. "It's now or never. Are you going to spill the truth?" Carter reached into his belt and drew forth the pearling knife he'd taken from the Fish Man. He forced himself to hold it tantalizingly near the flailing arms of the enmeshed Chambers.

"This knife can cut you free. But it won't, until you clear me."

But Carter had only to fight inherent decency. Chambers faced the madness of terror. And Chambers broke. "All right, for God's sake, I'll tell. I'll come clean, I tell you. Cut me free! For God's sake cut me free! I killed Prince Bramm. I framed you, started the revolt. I admit it, do you hear? I admit it. I admit it! Ohhhhh, God, cut me free!"

Carter turned to Alson Dodge for but an instant. "Enough?" he snapped. "Are you convinced?"

Alson Dodge, his face the color of death, could only nod and reply weakly. "Yes, that's enough. Now, free him. For the love of heaven, even he doesn't deserve to die like that!"

"CHIEF-ADMINISTRATOR of Venus," breathed a pretty red-headed girl on the balcony of the earth embassy of Twenty. "That's some promotion, even for a hero who staves off renegade revolts like people in stories."

"Yes," murmured Chief-Administrator Carter, taking a cue from the long forgotten balcony legend of Romeo and Juliet, "like a story, even to marrying the beautiful heroine and living happily ever after!"

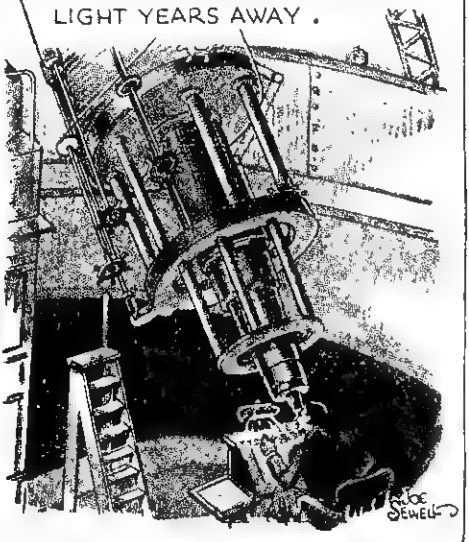
RIDDLES OF SCIENCE

How Large is the Universe?

SCIENCE HAS LONG TAUGHT THAT THE UNIVERSE IS A TREMENDOUS GALAXY, COMPOSED OF ISLAND UNIVERSES LIKE THIS **SPIRAL NEBULA**, EXTENDING BILLIONS OF LIGHT YEARS INTO EMPTY SPACE . . .

EINSTEIN ADVANCED HIS **FAMED THEORY**, AND PROVED THAT THE UNIVERSE WAS **CURVED**, THEREFORE BOUND AND LIMITED. HE GREATLY REDUCED THE CONCEPTION OF ITS SIZE . .

LATELY, **ASTRONOMERS** HAVE BEGUN TO SUSPECT THAT LIGHT HAS NO CONSTANT SPEED, AND THAT **THEIR** MEASUREMENTS OF DISTANCES OF STARS IS MUCH **TOO GREAT**; THAT THE UNIVERSE IS MUCH SMALLER, AND STARS ONLY **"LIGHT MONTHS"** INSTEAD OF LIGHT YEARS AWAY .



ALL through the ages man has looked at the stars and wondered how far away they were. And as his knowledge advanced, his concepts changed, until finally the "universe" grew beyond his imagination. He imagined a limitless void, filled with millions of galaxies of stars, but he asked himself, "What's beyond?" and got no answer. Science has advanced theories which suggest that the three dimensions of man's perception are not good "yardsticks" of the universe's size, because there are other dimensions beyond them, definitely finite, in actuality, not immense at all. Proof is still lacking.

★ WAR OF THE

Divided into six Zones, Mars became a giant scientific laboratory to advance Earth science. Then without warning furious warfare broke out...

by John Russell Fearn

As they leaped to their feet, Eva Wayne and Howard Sykes heard the roar of plane motors. "It's an attack on the Zone!"

SCIENTISTS ★

"HELLO, there, Eva! Anything wrong?"

Howard Sykes, young, blond, husky Earth ambassador to Mars, looked up from his desk questioningly.

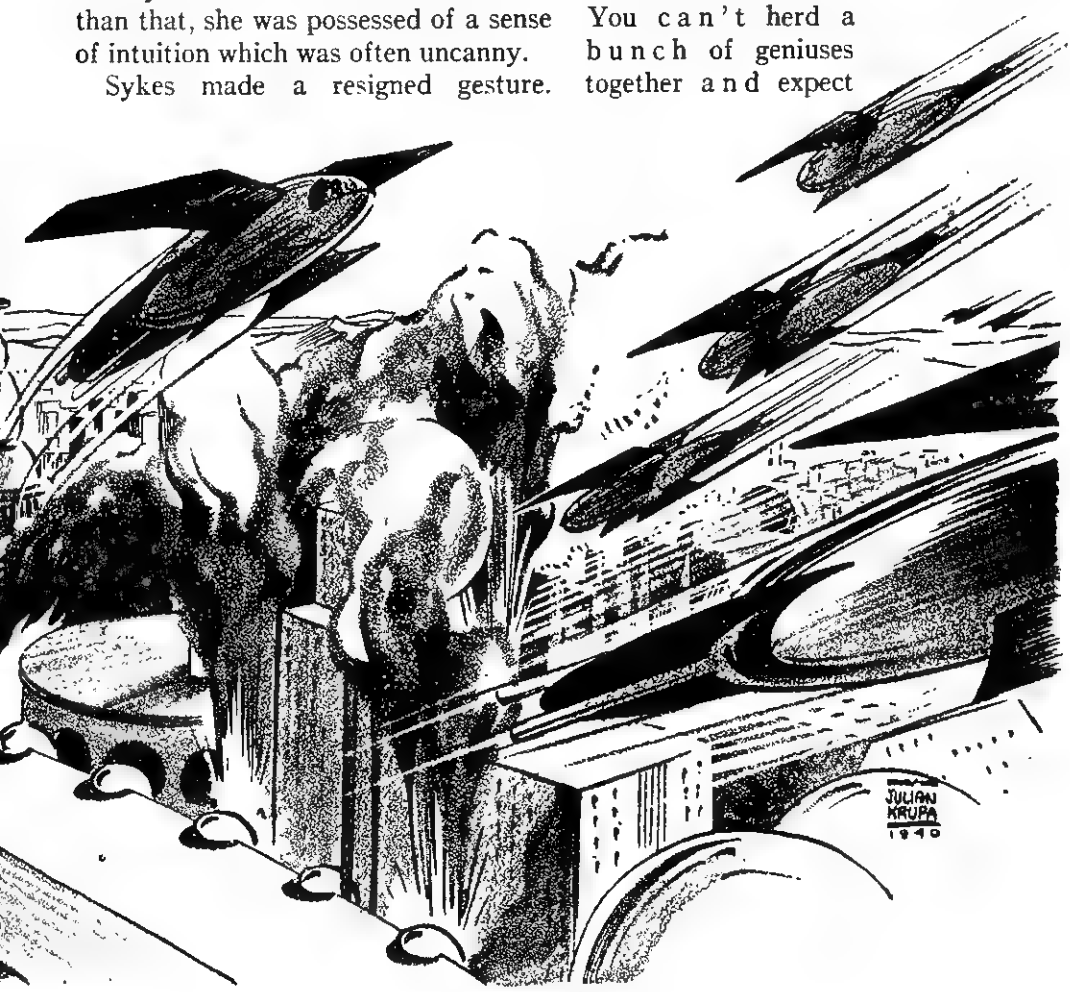
"I'm not sure, Howard. But I've got a funny feeling in my bones that things are distinctly not so hot."

Eva Wayne was a biologist. She was also twenty-five, had yellow blond hair and the most attractive blue eyes Howard Sykes had ever seen. Even more than that, she was possessed of a sense of intuition which was often uncanny.

Sykes made a resigned gesture. "Trouble in paradise! Well, dammit, just what is wrong?"

"Oh, there isn't anything actually wrong—not yet. But there's a growing feeling in most of the Zones that their particular Zone must be allowed to dominate all the rest. Each Zone seems to think that its particular function is the most important of the lot!"

"So that's it!" Howard Sykes slammed his engineer's fist on his desk. "Might have guessed that something like this would happen. You can't herd a bunch of geniuses together and expect



a harmonious love feast. What more do you know, Eva?"

When the girl was finished with her report, Sykes knocked the dottle out of his pipe, turned to his personal typewriter and began to pound away at an insistent rate.

Hon. Dudley Baxter, Consultant,
World State Federation,
New York City, America.
Dear Dr. Baxter:—

It is my unpleasant duty to inform you that after our six months' experiment on this planet, dissension among the six scientific Zones has definitely broken out.

When I undertook to rehabilitate this wasted red planet, it was with high hopes that as ambassador to Mars, the six-Zone colony that I would establish here would be sufficient unto itself, and that my presence as ambassador would be simply to supervise the administration of the Zones.

Now I am informed that our six Zones of scientific activity—physics, astronomy, cosmic engineering, biology, social welfare, and interplanetary eugenics—have each become jealous of the other. It was the World State's original plan to gather the world's greatest men and women scientists, fully equip laboratories here for their use, and set them to work on this isolated planet to develop the fruits of their researches—without infringing on each other's authority.

Each Zone was to have its own task; no task was to be duplicated. Coöperation between the Zones was to be permitted when necessary. It was thought that in twenty years, the independent researches of the six Zones would be integrated into a new world plan which would forever after insure peace and prosperity for all peoples.

That meanwhile, voluntarily isolated here on Mars, no one scientific branch could dominate the other, with the inevitable result that one branch of science might take up arms against the other and thus precipitate another World War.

Therefore, since this dissension has now broken out, I must ask you to hold yourself in readiness for all possible trouble, and to prepare for any eventualities which may occur. I will report to you again as soon as I have definitely isolated the cause of the controversy.

Howard Sykes,
Earth Ambassador.

Finishing, Sykes folded the report in an envelope, summoned a messenger, and gave orders to have his findings space-radioed in secret code to Earth.

He rose to his feet then, perplexed and with an angry frown.

"Dammit, the thing's fantastic!" he expostulated. "If the chiefs of each Zone start refusing now to get together, we're worse off than we were before! At least when we started this experiment, nobody was doing any bickering. Come on, Eva! We're going to get to the bottom of this if I have to lock every overgrown prodigy in a cell!"

As they left his office, Sykes asked the girl:

"Where would you suggest we start?"

Eva Wayne's forehead puckered. "Well, Dr. Hendriks, chief of our biological department, asked Dr. Brown of cosmic engineering to come over for a discussion on a matter of mutual interest. Brown's retort was that he had no time for biologists! Thus far, he's been the most outspoken of the dissenters."

Sykes face was grim. "Dr. Brown it is, then."

THE girl accompanied him down the long, airy passages leading to the cosmic engineering department. Dr.

Brown duly appeared from the army of workers when his presence was requested. For some reason his usually amiable round face was set and determined, his dark eyes filled with a stubborn fire.

"I believe, Doctor, that you refused to coöperate with Dr. Hendriks of biology," Sykes began, straining to keep his reputation as a diplomat intact.

Brown nodded briefly. "I did, yes. I have reasons for believing that my cosmic engineering research is far more important than Hendriks' specialty. I have neither the time nor the inclination to obey his wishes—and for that matter, I have little time to waste in talking to you, either. Our science is vitally important: biology is not!"

"That's ridiculous!" Eva cried hotly, flushing. "One science is as necessary as another in the advancement of a world civilization, and you have no right to say otherwise!"

"Just a minute, please!" Howard Sykes' voice was firm. The tougher a situation got, the more evenly his steel nerves functioned.

"Dr. Brown, how can you—a self-confessed believer in the pooling of ideas—say that your science is more important than another? What's the *reason* for it? You surely realize you are undermining the very thing for which we all came to this planet?"

"Circumstances alter cases, Mr. Sykes," Brown replied ambiguously. "I have my own reasons for thinking that cosmic engineering is more important than biology—and I refuse to coöperate. Now, if you will excuse me—"

He nodded curtly and turned away to his work once more. Sykes stood looking after him for a moment, frowning; then he returned slowly to the main corridor with the puzzled girl at his side. Inwardly he was seething.

"Well, now you know!" Eva said. "Imagine the shock *I* got! And Dr. Hendriks, too!"

"Damned if I can figure it out!" Sykes stood biting his lip. "Brown was one of our best coöperators when we first came here. Seems to have about-faced completely—Hendriks, you say, is still willing to exchange ideas?"

"Absolutely. No change in him at all; he's as loyal as ever."

"Good for him." Sykes rubbed his chin thoughtfully. "I'm going to find out myself how the other Zone chiefs are feeling. You'd better get along back to your job, and if you discover anything else that strikes you as out of place, let me know right away."

They parted company, the girl to the Biological Zone, while Howard Sykes boarded the swift-moving tube conveyance by which the planet's various Zones were interlinked. It was a six-hour job for him to check up on all the Zone heads and get their reactions.

The Martian night had arrived by the time he arrived back at his headquarters to ponder results. Eva Wayne, in off-work attire, was waiting for him.

"Anything new?" Sykes asked anxiously, as he caught sight of her in the light from his desk-lamp.

"No—I just thought I might be able to help you with your results. I've nothing else to do right now."

They sat down together, going over six sets of reactions which Howard Sykes had typed out from hastily scribbled notes. By a process of elimination it took only fifteen minutes to reveal a startling fact—that the heads of the Zones controlling cosmic engineering, astronomy, and physics had suddenly become adamant in their belief that their three specialized sciences were the only ones that mattered.

IN loyal contradiction, the other three departments controlling biology, eugenics, and social welfare were each un-

changed and willing to exchange ideas as before. To three departments, then, something mysterious had happened. Though willing to talk among themselves, they were definitely against their three Zone neighbors.

"Which means that cosmic engineering, astronomy, and physics are ranged in a solid bloc against the sciences of eugenics, biology, and social welfare," Sykes muttered. "It just doesn't make sense! The three obdurate ones are willing to talk among themselves—but not with the other three. What's it all about? *Why?*" He stared at the girl's face anxiously.

Then his fists clenched. "Well, the reason will have to wait. The important thing is, the departments controlling physics, engineering and astronomy are far more able, with their present knowledge and resources, to make an attack than are the other three departments—if matters should arrive at an actual state of war. They have all the forces of destruction ranged on their side. But to what end? Where is the sense in achieving domination?"

"That we don't know—yet." Getting to her feet, Eva joined Sykes at the window. "There's something phony about it all somewhere. Three ordinarily honest and intelligent scientists have gone mulish, and there's a reason for it. It's up to us to find out."

"To me, you mean. I'm the go-between," Sykes protested.

"We work together," Eva stated quietly. "We're on a planet that has an unknown history. We have no means of knowing what really happened to the people who once populated this world. In that might lie the answer to this new complex riddle; the answer may be in the very sand we plowed up and made fertile. Mastering a world for the purposes of colonization and scientific progress was not the whole battle, perhaps. There may be other things."

"That," said Howard Sykes grimly, "is what I'm beginning to be afraid of."

CHAPTER II

Attack on the Zones

IT was very clear in the ensuing days that, far from dropping their adamant, obstinate attitude, the respective heads of the physics, astronomy, and cosmic engineering Zones were, if possible, keeping more closely than ever to themselves and observing a curious prearranged secrecy. They held private conferences together, despite the fact that it was against the Zone law originally instituted by Dudley Baxter himself.

Eva Wayne, in a better position than Howard Sykes to see what was going on, had grave misgivings. The course of her work took her many times to the physics and engineering Zones, and while there she saw things which were anything but reassuring. Instead of getting on with their job of research, the engineers were building significant-looking machinery, the physicists were experimenting with new explosives and rays, and the astronomers were making problematical calculations that seemed to have a definite application to the distant Earth.

"There can be no doubt about it, Howard, that they are preparing for a battle with the three remaining Zones," the girl told him, after a week of careful observation. "Don't ask me why they're doing it—but anybody can see that there's an unbearable tension building up between the three Zones willing to coöperate and the three who are obdurate.

"There'll be trouble at any minute. Against the devices of engineers and physicists we'll stand no chance in the

other Zones. I hear also, though it's probably a rumor, that Dr. Brown has borrowed some heavy bombing planes from the city airport for a proposed 'experiment'."

"He has, eh?" Sykes thumped the desk impatiently. "Can't stop him doing it, of course, but I wish I knew why he had to do it. There's no reason—"

The girl shook her head hopelessly. "I didn't find a thing, either. Our only recourse is for you to get Baxter here before things get completely out of hand. Looks to me as though it's only a matter of days before the fireworks start going off."

"I'll tell Baxter right away," Sykes nodded grimly, and turned to the radio apparatus.

But before he reached it, he glanced up sharply at a sudden violent concussion. The vast windows of the office rattled in response, and for a moment livid glare flared through the Martian night.

"It's the Eugenics Zone!" Eva shouted hoarsely. "Look! It's being attacked by somebody—or something—Howard, they've started already!" She wheeled around, her face pale. Without warning—without even a declaration of hostility.

Howard Sykes stood staring out of the window, momentarily at a loss. Of the three great Zones clearly visible with their floods of light, the centermost was in the grip of a devastating fire. Just how the thing had been started was not clear.

Obviously the physics department had thought up some new and diabolical method of flame production, since the solid stone edifice of research was itself ablaze. Fissures were visible, too, from which rolled vast masses of smoke. Figures were already dashing for safety—but they did not dash far.

As they poured into the adjoining Zone, another shattering blast rent the air. Sykes' office windows completely shattered under the impact. Just in time Sykes caught the girl and flung her flat beside him, as razor-edged pieces tinkled and smashed around them. Immediately after, even as they got to their feet, there came the deep bass roar of airplanes.

WITH a soul-shattering racket, a squadron of heavy bombers thundered overhead and began to add their complement of destruction to the blazing Zones.

"It's fiendish — diabolical!" Eva raved. "There's no sense to a thing like this. Howard, I've got to get to the biology building. There are special notes there—years of research information. They mustn't be destroyed!"

He caught her as she swung to the door. "Don't be a darned little fool!" he shouted, gripping her arm. "What chance do you think you would stand? You'd be killed in a second. Here, sit down!"

Sykes thrust her into a chair by main force, then swung to the radio. To his dismay the apparatus refused to work.

"Dead," he breathed, glancing up. "It must be their doing! They've cut off communication with Earth—with anywhere, for that matter! Just what the hell—"

He stared bitterly through the windows at the blazing inferno. More bombs were dropping now, deliberately aimed at the armies of scientists and research workers running for safety toward the great areas of distant city where lay their homes and apartments. Through the lurid holocaust of flame and destruction, it was clear that hundreds of them were being ruthlessly slaughtered—the scientists of the Biology, Eugenics, and Social Welfare Zones. The other three Zones were left

untouched.

Howard Sykes stood in quivering fury, bitterly aware of his own helplessness. Eva joined him again, just in time to see her own Zone explode and start to spurt flame and death. The three Zones which had been willing to follow out the letter and spirit of Dudley Baxter's plan had ended in carnage and ruin. Somewhere, something was horribly wrong—

Moments later the various emergency units went into action. The air became hideous with the din of clanging bells, as fire engines and ambulances swept into view from the region of the city far down on the horizon. For one brief moment Sykes feared there was to be an air attack on the city also—but the expectation was not realized.

Evidently satisfied with their hellish handiwork, the bombers droned on their way into the darkness, the roar of their engines growing fainter and fainter. There was only one place they could be going—the colony's airplane base once more, far to the north.

Suddenly Sykes' office door burst open. It was Dr. Hendriks, chief of biology, who came in, blood-spattered and ashen-faced.

"Mr. Sykes—got to see you!" He spoke with obvious effort, reeled as he stood. He was clutching something in one hand.

"Here—" Howard Sykes caught him quickly. Between them he and Eva half carried the scientist to the leather armchair and eased him into it. Hendriks gave a weak nod of acknowledgment. The girl turned instantly to the water carafe and filled up a glass.

"Th—thanks," Hendriks muttered, sipping it slowly. "That's better—Those infernal devils!" he went on fiercely. "It was a deliberate attack on us for no reason whatsoever. But—but I think I have the reason. You, Miss Wayne, gave me the clue."

EVA looked surprised. Hendriks held his chest painfully for a moment, then went on.

"You said one day that it might be in the air—but we proved together that it wasn't—Remember?" He looked at her from hollow eyes.

"Yes. But what else could—"

"When the explosions happened tonight, one of the young men from the physicists' Zone was caught. He had set the explosive fuses, I think. They—they brought him to our laboratory. He was abnormal—raving with desire for—for destruction. He was injured too—bleeding.

"I took a blood sample and examined it. I found out queer biological reactions; then—then they started exploding our Zone as well, and I had to run for it. Here's—here's the slide from the microscope. You—you take care of it—"

Hendriks suddenly stopped talking and his haggard face froze into gray rigidity. Without a word he toppled forward out of his chair, his clenched right hand opening to release a small oblong box.

"Dr. Hendriks!" Eva sobbed, horrified. "Dr. Hendriks!"

Howard Sykes slipped his hand over the scientist's heart. He withdrew it instantly, stained red. Eying it he gave a shudder.

"The poor fellow must have been hit with shrapnel or something near the heart and just managed to get this far," he said bitterly. "He's dead—"

Sykes paused, picked up the box and handed it to the dazed girl.

"Here, you'd better take it. He entrusted it to you."

Eva took it in nerveless fingers. "Those fiends!" she sobbed. "I'll never rest until—"

Sykes gripped the girl's shoulders firmly. "Now listen, Eva," he said,

"nobody around here is half as burned up about this as I am." The veins stood out angrily on the Earth ambassador's strained forehead. "But right now, we've got to go after these devils coldly, calculatingly. If we lose our heads, they'll wipe us out to the last man. This is a scientific war, Eva—not a man to man struggle—"

"Mr. Sykes is right, you know, Miss Wayne," a voice from the doorway observed deliberately.

They wheeled around together, startled to behold the figure of Dr. Brown standing there, a peculiar expression on his round face. It struck Howard Sykes that the cosmic engineer was trying to look vicious and yet did not really want to. His voice, however, was tinged with cold venom.

"I suppose all this butchery and destruction is your doing?" Sykes demanded, moving forward. "Just what's the idea? How long do you think you can get away with it?"

"I don't need to 'get away' with anything—the work's finished." Brown, self-confessed peace lover, made the admission with studied complacency.

"It was necessary to destroy the headquarters of the Eugenics, Biological, and Welfare Zones because they are superfluous. Such sciences will be needless in the New Order. The three dominant sciences of astronomy, cosmic engineering, and physics will now hold the field and dictate future terms."

"Just what 'new order' are you talking about?" Eva shouted. "What fiendish plan are you mapping out now? *You killed Dr. Hendriks, and—*"

"For various reasons, it is necessary that three sciences alone should dominate Mars—and later, the Earth," Brown replied calmly. "Those scientists who are left from other departments will be under our control from now on—those who escaped death, I mean—as you did," he said meaningly.

BROWN smiled coldly. "The city—in fact, the whole planet—will come under the control of myself, and Doctors Latham and Poste, the heads of the Astronomy and Cosmic Engineering Zones," he said. "We plan a Triumvirate, a scientific domination for reasons which will only become apparent as time goes on. We have planned it perfectly and the whole army of research workers, men and women, who have worked with us are entirely in accord with our aims.

"As for you, Miss Wayne, you are a prisoner, of course—or I should say, a worker, under our dictates. You will be transferred from useless biology to cosmic engineering."

She shook her head firmly. "Not if I know it!"

"The alternative," Brown murmured, his dark eyes gleaming, "is death."

He turned then to Howard Sykes. "You, Mr. Sykes, are the ambassador from Earth," Brown went on, ignoring the girl entirely. "You will return to Earth with an ultimatum to Dudley Baxter and the World State Council. The ultimatum is that the World State Council must voluntarily relinquish its present control over the Earth and submit to the dictates of the Triumvirate we shall establish here.

"A scientific leadership will be set up, with me at its head. Those who wish to leave Earth and come to Mars to live under our protection will be given safe passage; those who do not must take the consequences."

"And the consequences mean a war of supreme scientific horror, eh?" Sykes demanded grimly.

Surprisingly, Brown shook his head. "No—not war. Just — alterations. Just something so unpleasant that even I do not like to think about it."

"You boys like to play rough, don't you?" Sykes snapped. He turned imploringly to Eva Wayne.

"Eva, they've got us off our guard, and we may as well realize it. Do as you are told; it's the only way—for the present. As for me—I'll deliver your ultimatum to Earth, Dr. Brown. And the answer will be—'go to hell'!"

"That is entirely possible," Brown purred sneeringly. "Only—it will be an inferno, I am afraid, of our own design!"

Mockingly, Dr. Brown bowed the two of them out of the door, himself bringing up the rear. Eva started when, angrily jamming her hands in her pockets, one of them came into contact with the small oblong box which Dr. Hendriks, dying, had brought into the room. Tight-lipped, the girl betrayed no inkling of the sudden question which tugged at her mind.

CHAPTER III

Death en Masse

BY advance radio Howard Sykes warned Dudley Baxter of his coming. The moment he arrived at the Earth spaceport, he was whisked by fast airplane to the city center and thence to the private chambers in the Administration Building where Baxter, chief consultant of the World State Federation and numerous officials were already gathered to meet him.

"Now, Mr. Sykes, what exactly *is* going on?" Baxter asked anxiously, when the formalities were over. "Most of what has happened we already know from telescopic observations."

"I've been instructed to deliver an ultimatum," Howard Sykes replied bitterly. "You are asked to put the whole Earth under the control of the Martian Scientific Triumvirate, who will decide what is to be done for the future. You are also asked, in your own interests, to move as much of the world's population as possible to Mars, if you wish them to escape some sort of horrible disaster."

"A war?" snapped President Johnston, elective head of the World State.

"Dr. Brown did not say so, sir. He hinted at an 'alteration'. I've no idea what he meant—except that it would be terrible beyond comprehension."

Baxter tapped the desk impatiently. "And do Dr. Brown and his two associates dare to think that they, scientists, can give such orders to the World Council? I never heard of anything so—so outrageous!"

President Johnston snorted angrily. "You say Dr. Brown demands unconditional surrender? Why, even Hitler used to make offers of negotiation during the Second World War!"

"You forget, Mr. President," Dudley Baxter said acidly, "that *Herr* Hitler faced the best army and the best navy in the world! Just what have we got up our sleeve? Nothing—the whole world disarmed after the Second World War!"

"Well, what's this terrible menace that Brown is about to unleash, then?" President Johnston demanded.

Howard Sykes shrugged angrily. "I wish I had even the faintest idea, sir. Brown and two of his otherwise perfectly sane colleagues have suddenly become cold, scheming madmen. I think the best policy to pursue for the time being—"

"Policy be damned!" Dudley Baxter snorted. "I'm refusing Brown's ultimatum—absolutely! Let him make the first move. We'll find a way out, somehow. We always have!"

Sykes sighed resignedly. "I told Dr. Brown that would be your answer. Well—I guess the only thing for me to do is to return to Mars and set myself

up as a diplomatic observation post. Keep radio communications clear of all interference from now on. If anything breaks, I'll do everything—murder not excepted!—to get through to you."

The members of the World Council nodded their heads in agreement, and remained in Baxter's office discussing ways and means to combat this terror which as yet had not even struck. Himself emotionally exhausted from the ordeal he had been through, Howard Sykes went to his own private apartment in the city and fell asleep the moment his head touched the pillow.

He awoke the next morning feeling satisfyingly relaxed. But five minutes later, when he opened his apartment door and reached for the morning paper, the funereal black headlines tied his stomach up in a knot.

"My God—Baxter must have radioed to Dr. Brown his refusal of the ultimatum!" Sykes groaned. "He couldn't wait for me to announce it as diplomatically as possible!"

The headlines read:

WORLDWIDE SPACE SHIP BASES RAZED IN MYSTERIOUS BLASTS

Destruction Follows Baxter's Refusal of Ultimatum from Mars

Violent explosions struck at space ship bases all over the world last night, in a fury of destruction which leveled to the ground not only spaceports and hangars but even manufacturing plants and rocket-fuel works.

The explosions began almost without exception within three hours after Dudley Baxter's radio message to a so-called Martian Triumvirate, in which Baxter refused pointblank to accede to any of the Triumvirate's demands conveyed to the World Council earlier in the evening by Ambassador Howard Sykes.

According to carefully checked reports, the destruction was not the result of sabotage. Spaceport managers and manufacturing executives all said that company detective systems failed to reveal the presence of saboteurs.

This newspaper learned early this morning from an unimpeachable source that a committee of three formerly sane scientists seized control of the Martian colony established six months ago by World State Consultant Baxter. Its leader, Dr. Brown, dispatched Ambassador Howard Sykes to his home government, to deliver an ultimatum the terms of which would mean a complete loss of Earth independence. Further. . . .

HOWARD SYKES flung the paper down savagely, scrambled into his overcoat and raced out of the building. In ten minutes he was with a worried Baxter in the private chambers of the Administration Building.

"Yes, yes, I know why you've come," Baxter sighed. "They've blown up our only means of getting to Mars. They did it right after I told them I'd have nothing to do with their plan.

"I've had what few experts we've got working on this job, and it's pretty clear the trick was pulled by etheric vibration. A vibration sent forth from Mars caused a straight-line ripple in the ether between Mars and Earth. When the ripple hit Earth in the predetermined spot, matter—*as* matter—simply telescoped into itself. Electron hit proton and the outcome was a violent explosion.

"We've dreamed of it for years. In fact, we've had it right in our hands, only we thought we'd never have to use it. They've done it on Mars, with unlimited science and power at their command."

Sykes muttered something under his breath that would not bear repeating in print. A moment later, both men's eyes widened as the signal-light on Baxter's special desk-set radio receiver began to wink violently.

Baxter snapped the switch. "Dudley Baxter speaking. Who calls?"

The voice sounded infinitely far away—a woman's voice.

"I must speak to Howard Sykes if he's still there. *I must! Hurry!*"

"It's Eva Wayne!" Sykes cried hoarsely, flinging himself before the apparatus. "It's me, Eva!" He grabbed

the microphone. "Quick—speak!"

There was a long interval as the message hurtled millions of miles across space. Then Eva spoke again, her voice ethereal with vast distance.

"Listen carefully! I'm taking a big risk, speaking from a mobile radio set. I've found something. That slide Hendriks left—"

Sykes' hand reached for a pad. He took the girl's words down in shorthand.

"That slide contained a drop of blood from the young physicist. You remember? Well, the drop is teeming with bacilli. What is more, when they are isolated and studied, they prove to be anything but normal bacilli. My private biological experiments lead me to think that they are *intelligent and highly organized!* I've had some time in which to make my tests, remember."

EVA paused a moment.

"My theory is that Mars was not entirely dead when we took it over! It is the accepted law of evolution that the last survivors on any planet will be a race of intelligent bacilli. They are the hardest things to destroy, and must ultimately outlive all humans and insects which will precede them in the scale of life.

"The evaporating air of Mars finally sent these bacilli into a kind of inanimate hibernation. When we brought warmth and air back again—they revived! They are intelligent enough, I believe, to reason and they saw a chance to restore their old heritage of science and domination.

"Upon recovery many of them passed into the bloodstream of the scientists seeming most likely to aid them—the physicists, the cosmic engineers, and the astronomers. The other sciences they destroyed as needless, especially the Biology Zone, since it might reveal their secret and upset their plans.

"These bacilli, as I see it, cannot produce hypnosis in the minds of their human carriers, but they *can* influence certain brain centers. What they have done is to speed up the knowledge of the physicists, astronomers, and engineers, and have also depressed certain brain centers by pressure, which has produced a stubborn refusal to coöperate.

"A tumor can produce the same effect, remember. Pressure of certain amounts of bacilli—harmless from the disease point of view—has had a similar influence to that of a tumor. On the one hand unreasonableness; on the other, amazing genius."

The signals stopped. Heart beating, Sykes said:

"Message received. What is implied by all this?"

After the customary pause the reply came back.

"Those bacilli inside the scientists will undoubtedly remain there to continue their hellish work. The others, spawning in the resurrected soil of Mars, will possibly seek Earth as their new habitat. That is the reason why their comrades inside the scientists have inspired Dr. Brown and the others to make demands on the Earthly government.

"An invasion of the world by intelligent Martian bacilli is not improbable—but that would presuppose conditions on Earth equal to those on Mars in its heyday: a lighter air and lesser gravity. The scientific engines controlled by Brown, his brain controlled in turn by the bacilli, may possibly find a means to produce such conditions on the Earth.

"But the biggest danger lies in the fact that once the bacilli land on Earth, they will be able to evolve *naturally* apart from a bloodstream, as they would have evolved had Mars not died. That means bacilli of giant size in a very short

time, for their metabolism is amazingly fast.

"I cannot tell you more now. There is danger—"

The red pilot light expired. Baxter stood erect, his face astounded.

"This is the damnedest thing I ever heard of! Well, I'll call an emergency session of the World Council this afternoon, to consult on ways and means of beating this invasion."

There was a harsh brooding light in Howard Sykes' eyes.

"You can kill armies of men," he said slowly. "You can bomb cities, sabotage munitions plants, sink navies. But—you can't fight billions and billions of germs which so far haven't even been classified!"

CHAPTER IV

World Chaos

THE World State Council met that afternoon and deliberated for five hours, as councils have a way of doing. Desperate expedients were discussed at white heat; whole campaigns for warfare outlined, set down on paper, and then torn up.

After all, what could the good council fathers do against the most minute and yet most deadly enemy of them all—a minuscule, microscopic jot of bacteria which in the aggregate comprised a guerrilla army of incomprehensible destruction?

Howard Sykes, however, obtained permission from World President Johnston himself for the construction of a personal space ship to carry him to Mars. For a week and more he was kept busy at a secret space machine factory. It was a week of intense activity in all parts of the world as the World Council marshalled its forces and issued orders for an impending struggle. Then at the end of the week the Triumvirate struck with all their diabolical power.

The first signs of disaster began in the curious calm which descended on every part of the world. From pole to pole a dense mass of cloud formed over the planet Earth. Airmen sent up to make observations reported a cloud density hundreds of miles thick, reaching right up into the stratosphere, while their instruments recorded the presence of vast amounts of potential electricity. *Something had gone wrong with the atmosphere!*

Down on Earth the remaining scientific experts worked ceaselessly to explain away the heavy, charged pall that had descended on the world. It persisted for three days, blotting out the sun, giving a twilight glow to the daylight. Its effects made people jumpy and nervous; dogs barked incessantly. There was a curious, crushing calm in which not a tree moved. Not a breath of wind was on the land. The oceans of the world subsided to a dead calm.

On the third day the experts integrated their findings and presented their conclusions promptly to the World Council. Howard Sykes was present when they arrived in a body.

"The Triumvirate are building up a vast potential electrical field in the atmosphere," World State Consultant Dudley Baxter said grimly, glancing up from the report. "This has been accomplished apparently by the training of cosmic forces upon our electrically constituted atmosphere—a natural condition. When a certain point is reached, there will be an atmospheric fusion—a thunderstorm on a titanic scale racing round and round the globe!

"When this storm has expended its fury, there will be a perceptible lessening of the air pressure. There will be a blasting of molecules, a weakening of the upper electrical layer which will

keep our atmosphere at an even pressure."

Baxter paused, added bitterly, "The intention, obviously, is to bring the atmosphere down to the level which a Martian bacilli can endure in comfort —but which will probably choke most of us to death!"

"And there's nothing we can do to combat it!" Sykes muttered helplessly, pacing slowly up and down. He stopped at the big window and gazed out over the twilight mass of illumined New York. It was hard to believe it was only mid-afternoon. Overhead that pall loomed. . . .

Abruptly, almost as though by evil prearrangement, the room suddenly crackled with a blaze of violet flame. Sykes felt his hair actually stand up under the force of sudden electric discharge. The whole group glanced up, startled, and at the identical moment there was a sound overhead like the tearing of linen, followed by the most appalling thunderclap.

WINDOWS rattled in their frames, pens and ink bottles on the desk jarred with the vibration. In the heavens outside, the terrific report shattered to the four corners of the horizon.

"It's come!" Howard Sykes shouted, getting a grip on himself again. "The storm's here! They've started changing the atmosphere! We've got to get the people into basements wherever we can. This storm will make more hideous anything in the history of the elements before it's finished. Better give the orders, sir!"

Baxter jumped to the radio and switched on the emergency band. As he gave his commands to the controllers of the population, with instructions to relay the information to other cities and countries, the storm roared in ear-shattering concussions.

Appalled, Howard Sykes stood by the window. Before his gaze lightning slashed the sky in zigzagging bolts of blue fire. Monstrous "trees" of electricity hurtled down the now totally black sky toward the city buildings. Here and there pieces of masonry flashed and exploded into dust under the violent onslaught.

"Radio's gone dead!" Baxter announced suddenly, glancing up. "Must have struck the power house—"

He headed for the door, then glanced up in alarm at a sudden vast concussion from above. Sykes glanced up, too, in time to see the white enameled ceiling suddenly part across its entire length. Plaster and bricks came raining down through the gap. A beam splintered further along.

Sykes had scarce a moment in which to make up his mind. Self-preservation sent him hurtling through the open doorway like a stone from a catapult. Even as he scrambled through it a deluge of masonry, steel bracing and upper structure came thundering down.

Countless tons of debris dropped cruelly on the members of the World Council and the well-nigh frantic Baxter, wiped them out in a second of time!

Sick with horror, Howard Sykes blundered down the passage, his way lighted by the blinding flashes of lightning. He was joined by scurrying men and women, most of them from the other departments represented in the vast Administration Building. In a shouting, hysterical mob they rushed down the broad staircase or crammed into the elevators, only to find the power was off. Sykes headed for the basement.

The thunder, the tortured rupturing of the air by electric discharges, was something beyond imagining. The whole building responded to the cannonade. Windows cracked and shattered, instruments in fragile cases crumpled

up, electroliers in the ceilings started swaying as the building maintained a steady trembling.

In a sudden onslaught rain came splashing down—a hammering deluge which descended in hissing torrents on the steps outside the building and sent little rivers rolling into the broad entrance hall. Howard Sykes stopped long enough to assist the hall porter to close the doors.

Outside, the air seemed suffused with purple. Chain lightning was leaping in devastating streaks up and down the midnight dark of the heavens and from building to building. Not a soul was in the rain-lashed streets: everybody had taken to shelter. Only abandoned cars and buses were visible, clear targets for the fury of the onslaught.

Once the street doors were closed the horror was shut out. Shaken, Howard Sykes went below into the basement, took his place among the mass of white-faced men and women. To most of them, unaware of the scientific nature of the storm, it looked as though the end of the world had come.

FAR from letting up in the space of a few hours, the storm seemed to increase its hellish fury until it was noticeable even down in the bowels of the earth. Through the vast walls of concrete the onslaught of lightning crept ominously. There were visible flashes of purple fire at intervals, stupendous concussions that could only mean the collapse of buildings in the neighborhood.

Howard Sykes was the first man in the Administration Building to notice that the air in the cellar was getting curiously thin. It was becoming harder to take a deep breath, and his heart was pumping far more rapidly than usual. A sense of odd lightness came to him presently, as though something was buoying him up.

The men around him tore open their collars and mopped at sweat-streaming faces. Women began to gasp painfully, dropped helplessly to the floor in a dead faint.

"Say, something's wrong here!" The man next to Howard Sykes turned a lean, perspiring face. "Air's giving out. Vents to the surface must be choked."

"You're right there, brother," Sykes said, and gasped with the effort.

Then his eyes widened. This man was Steve Walters, one of Earth's best-known zoologists. For his part, Walters' recognition was mutual.

"Why, Ambassador Sykes! This is one devil of a fix, isn't it?"

"You're telling me! Say, you're Steve Walters, aren't you? Well, let's put our heads together. Maybe we can figure some kind of an out."

Walters nodded vigorously. Both men pricked up their ears then; there was an almost imperceptible lull in the onslaught outside, but even as they listened the storm seemed to subside. Half the inmates of the basement now were stretched out on the floor, gasping for breath. The others looked ashen-faced, exhausted.

"Well, let's take a crack at it," Sykes said grimly. "No use dying like rats in a trap."

Sykes got to his feet, stumbled as the peculiar lightness of the atmosphere caught at his lungs. Walters came staggering to his side with an alarmed expression on his face.

"What the hell—"

"The Triumvirate boys don't miss a trick," Sykes growled. "First they thin the air, then they distort gravity to the equal of that on Mars. All right—give me a hand here."

Together they unbolted the basement door. The minute it swung open, a deluge of water came tumbling in to make

more miserable the prostrate people. They got up from the floor hastily, only to stagger about and gape at what had gone wrong with their weight.

Slowly, Sykes and Walters climbed the steps to the external exit of the basement. A cool, fresh wind blew in their faces; twilight darkness was all about them. Evidently it was normal night now for a moon was shining through ragged, dispersing clouds. Something was wrong—very much wrong.

"My God!" was all Walters could say, when they came to looking at the city. "Oh, my God!"

Howard Sykes stood motionless, taking in the scene. Behind him feet were shifting on the steps as people came shuffling up. They gathered in a baffled, panting little group and stared open-mouthed at what had been a mighty city a few hours before. Now it was a desolate shambles. The familiar skyline had disappeared. In their stead were blackened skeletons gaunt against the darker night, debris-glutted rivers where broad streets and magnificent highways had graced a progressive city, ugly tattered facades lined in ghostly parade against the moon.

"Destroyed!" Steve Walters whispered. "New York wiped out in a few short hours. I—I wonder what happened to London, Paris, Moscow—"

"Probably the same catastrophe that struck at New York," Sykes said unhappily.

HE turned then to face the silent, unnerved group of people that had emerged from the basement behind them.

"My friends," Howard Sykes began in tones of assurance he didn't feel, "we are the victims of a vicious plot organized and carried out, as you now probably know, by a group of three Earth scientists on Mars—the so-called Triumvirate.

"The Triumvirate has committed unpardonable acts of aggression against the innocent people of Earth! Up to now, we have had no weapons with which to strike back. But be of courage! As Dudley Baxter and World President Johnston would say, were they happily alive, all of us must now stand together to present a united front against the enemy.

"With God and justice on our side, we shall yet find a way to turn back the enemy at our very gates and destroy them to the last man. It is as inevitable as the future history of mankind. Progress, not wholesale death, is our stated destiny!

"Since I am the last remaining official on Earth, I will undertake to organize the peoples of Earth in an invincible army which will wipe out the evil forces of enslavement and death!"

For a moment after he finished speaking, there was a hushed silence. Then a great roar of approval seemed to surge upward from the very souls of the people about him.

Howard Sykes had thrown down the gauntlet in the teeth of diabolical genius. Could the people of the world mobilize for effective resistance before that brave challenge was taken up?

CHAPTER V

Invasion!

IT was only as the days passed, as some sign of order was restored out of the dreadful chaos and communications were slowly reestablished, that the full story of the frightful catastrophe could be pieced together. It became clear that in six hours of elemental horror, the scientific machinery ruled by the Triumvirate—at the behest of the

Martian bacilli—had accomplished a dual purpose.

Electric forces, begotten of the cosmos itself, if the force of the onslaught was any guide, had simultaneously reduced the atmospheric pressure to that compatible with Mars in its heyday, while those same electric energies had evidently penetrated right through the earth to displace and shift the electronic structure of matter itself.*

By degrees small representative governments sprang up again in the ruins of the world's cities. What few men there were left with either political or scientific gifts did their best to marshal some sense of order, set about the slow and painful rebuilding of what they had lost.

Howard Sykes, the only surviving representative of the World Council, along with a few remaining scientists and experts, made himself a leader and established new headquarters in the ruins of New York. With builders and technicians he did his best to try and get things on a decent footing again, worked ceaselessly to alleviate the sufferings of the people. In most of this he had the unstinted aid of the unimaginative but willing Steve Walters.

The first thing Sykes did was to reestablish the inter-spatial radio station, in order that he might receive any further messages from Eva Wayne. To contact the girl herself was impossible, might indeed put her in worse danger. For another thing, his own trip to Mars was for the moment out of the question. The storm had racked his personal space ship to little splinters.

Then on a calm, clear day in late March the expected invasion arrived.

Radio reports began to pour in from ocean and land alike of the presence of a thin and irritating mist of sporelike objects. Starting in the equatorial regions, the news spread rapidly to all parts of the globe and within six hours the actual mist arrived over New York.

The evening sun was blotted out by a brown curtain, as myriads of tiny objects dropped to the ground and were whisked by the wind to pile up like snow against ledges and sidewalks.

"It isn't possible that they're bacilli themselves," Howard Sykes said to the gathered men in his headquarters. "Bacilli are only visible under the microscope. So these Martian bacilli are probably encased in these ball-like containers, which will either melt or break up later on to release their cargoes of death."

"That settles it!" Steve Walters exclaimed. "At last we've got something tangible to attack!"

"Right! We've concentrated in the past few months on the building of endless numbers of flame-throwers, and they alone are likely to get rid of the stuff. I'll give the order to get the counter-attack under way immediately!"

But though Howard Sykes' command was given and promptly carried out; though fleets of land tractors and airplanes newly built and fitted with long-range flame guns went at once into action, it was obvious that the counter-attack was doomed to failure.

The Triumvirate had planned their invasion too well for an early defeat to be possible. For the Earth forces to cover every part of the world with flame guns was utterly out of the question, yet no method short of this could insure the absolute destruction of the myriads of spores.

As Howard Sykes had expected, the

*The earthquake and violent electric effects at the height of the storm had obviously been the outward sign of this. In that time energies had been shifted and rebalanced. Matter itself had undergone a change. Mass had given off energy and lessened its molecular constitution, thereby cutting down its former attractive force to that of Mars itself —Ed.

shell-like containers burst open after an hour or so. What happened then was not visible, since the bacilli were outside visual range. Only when vast numbers of them congregated together in a black swarming mass was it possible to detect them and attack.

UNDER the sublime Martian conditions produced on Earth, however, the growth of the menace was staggering in its speed. Though millions of the things were destroyed by every known means in every country, tens of thousands arose to take their place, harmless enough to life from the point of view of disease but deadly when it came to intelligence.

They grew almost under one's eyes, following the usual form of bacilli by expanding into rods, spheres, and all manner of diverse shapes.

Their method of feeding seemed to consist of consuming nitrates from the ground, and there was much to suggest that they were able also to utilize parts of the atmospheric gases for their sustenance. Watching their progress anxiously, Sykes and his colleagues could gradually piece together the nature of the things.

They conversed by telepathy, that was evident. Their intelligence was of a high order too, and was obviously maturing as they grew in size. That they would ultimately come to dominate mankind was more than a grim possibility. . . .

By the end of April, millions of the things had become full grown, though their exact intentions were still wrapped in mystery. They could be seen floating through the air over city and countryside. Some seemed to drift with apparent aimlessness. Others would sometimes depart in hordes into the sky and be lost to sight. Some weeks later they would reappear and begin to drift.

Several times Howard Sykes watched this queer migration, until gradually the truth began to filter in upon him.

"Is it possible that the damnable things can fly through space?" he asked Steve Walters one day. "It is well known that bacilli spores—even the tiny normal ones—can resist the temperature of absolute zero. These things possibly fly to Mars and back through some process of their own."

Walters shrugged, his thin face long and gloomy.

"So what? All that concerns me is the fact that we can't defeat the damned things!"

"Yeah. But somehow their ability to fly through space—if that is what it is—gives me an idea."

Sykes scratched his chin pensively, deep in thought. Then he looked up in surprise as the door burst open to admit Roy Granville, the young chief radio engineer.

"Mr. Sykes—Mars is contacting us! Quick!" And he dashed out again at top speed.

Howard Sykes flashed one glance at Walters, then tore out of the room like a whirlwind, down the passage and into the radio transmission-reception department on the lower floor. It was the far-away voice of Eva Wayne!

"I must speak to Howard Sykes if he is still alive. If not, somebody in full authority. Hello! Calling Earth! Urgent—"

"Okay, Eva, go ahead! It's me!" Sykes sat down at the transmitter.

He fretted and fumed at the delay in transmission and reception across the spatial gulf. Then the girl's voice came in again, eager and excited.

"Hello, Howard! Oh, thank God you're safe! I know what these Martian fiends did to Earth. Dr. Brown and the others *had* to do it—they couldn't help themselves! Listen, I've found out

what they are trying to do.

"The principal controlling Martian bacilli are those in the bloodstreams of Dr. Brown and his two main colleagues, as well as in the systems of several of the scientists in lesser rôles. It is through Brown, the dominant mentality, that these bacilli have gained control over Mars.

"THE bacilli projected to Earth are intelligent enough, but they will only act under orders from their masters plotting inside Brown and the others. You understand? Brown, as the involuntary mouthpiece, will give orders to them. The things can fly through space from Earth once they have matured. They come to Mars to receive their orders, then return to Earth.

"Now, the idea, as far as I can make out, is to retain all the scientists on Mars, make them serfs to follow out Martian orders of scientific progress, while the Earth will become a spawning ground for the new Martian bacillary race. That means that Earthmen will be eliminated as a useless, primitive form of life. That may come at any time!"

Despite himself, Sykes could not help but shudder at the diabolic scheme.

"The giant bacilli will destroy the human race by various means. For one thing, their mentalities are strong enough to cause less mentally equipped Earthmen to lose their reason. In physique they are somewhat hampered by their queer shape, but they can do an awful lot of burrowing and snipping.

"Look closely, and you'll find that the rodlike ones—those able to fly through space—have pincer mandibles. With those pincers they can—and will!—cut all lines of communication, eat through buildings, slowly but surely bring down mankind's every structure. It may take years, but it will succeed, and finally everything on Earth will be destroyed.

"All that will remain finally will be our planet, so altered atmospherically and gravitationally as to be another Mars. On Earth they can then pursue their aims, which were cut short when Mars' air supply gave out. On Mars will remain the controlling faction—bacilli-dominated Earthmen with the necessary physical attributes to make instruments, weapons and so on."

Eva's voice, millions of miles distant, trembled audibly.

"Because of their eternal numbers, nothing can stop these bacilli from overrunning Earth! Howard, only one thing can possibly block them. Somehow, the master bacilli impregnating Dr. Brown and the others must be destroyed! I cannot do anything—I'm too well known as a possible revolutionary. I risk my life every time I radio to you.

"Howard, you must get to Mars *somehow!* As an outsider, and therefore not included in the general census of workers which has been made on this planet, you might be able to do something. Now I must go—"

The communication halted abruptly. Evidently something on that far-away world had startled the girl, and she had switched off. Howard Sykes got up slowly from his chair, brows knitted.

Then his eyes brightened with excitement. "But perhaps I can!" he breathed. "Perhaps I *can!* I've got an idea. Come with me, Steve! The ol' brain shows sudden signs of returning to life!"

CHAPTER VI

Journey Extraordinary

WALTERS' bewilderment was obvious when he and Howard Sykes entered a huge disused foundry, designated as the incinerator for the Mar-

tian bacilli which had not escaped the desperate attacks of armed forces in New York. Here squads of men hurled the carcasses into raging furnaces, both dead and partly dead beings suffering the same treatment.

Howard Sykes went through a systematic search and finally discovered one of the rod-shaped objects, bullets imbedded in its brain. He dragged it clear of the others and looked it over quickly.

"Guess this'll do," he said briefly. "Intact, except for the shattered brain case— Now look Walters—you once mentioned something about stuffing animals. You're a taxidermist, aren't you?"

"Sure. Part of my former job as zoology chief."

"Anything to stop you from examining this thing, probing its entrails, to enable you to find out what makes it able to fly through space?"

"I guess I could do it, but— Good Lord, man, what are you driving at? You're not suggesting that—"

"I'm suggesting that a bacillus is the only thing that can get to Mars undetected. Find out what makes that bacillus tick; then, if you get that far, we'll see what else we can do. Dammit, we're going to beat these babies at their own game!"

"Right! Give me a hand to carry the thing. I'll need instruments, too."

Between them they lugged the heavy carcass out of the place, carried it to Walters' newly equipped laboratory immediately under the headquarters office. Walters, tackling a job right up his own alley, went to work immediately, while Sykes returned to his office in another part of the building.

Three hours later Walters came in through a private entrance, wiping his hands.

"First time I ever had to analyze a creature with the help of physicists," he observed. "The innards of that darned thing are like an electric battery or something in the way it works. As a glow worm can produce cold light by chemicalization, as a spider produces endless webs, so do these Martian bacilli utilize cosmic radiation—or so the physicists tell me."

"In what way?" Howard Sykes demanded earnestly. "Be explicit, man!"

"Here it is." Walters tugged a sheaf of notes from his pocket and started to read from them. "There are radiations in the ether which we can only guess at—the ones which we understand as such are gravitation, light, cosmic waves, and so on. But there is also an accepted range of hundreds of radiations of which we know nothing.

"As a bird can float on the air, as a fish can swim the sea, so can this bacillus utilize one fixed radiation forever in space in order to propel itself along. It is a radiation of force, as near as I can describe it. The force passes through the complex entrails of the thing and is there turned into a useful quantity by semi-electrical processes.

"It can, so to speak, absorb the radiation at one end, change it in the middle by reason of its organisms, then discharge it at the tail for propulsion and guidance. Believe me, these Martian bacilli—the rod ones, anyway—are masterful creations of nature."

"We've got it!" Howard Sykes breathed, his eyes gleaming. "We've got it, man! *I can get to Mars!*"

"HUH? Now, listen—"

"No, you listen to me! Is it possible to make enough room in one of those damned things—the one you've examined, for instance—for me to lie out flat? Can you remove enough of the needless entrails without disturbing the vital natural organism it possesses?"

WALTERS frowned. "I can try. But you're not thinking of traveling yourself to Mars in the carcass of that thing?"

"Why not? You know enough about the curing of pelts and the stuffing of animals to make the inside as near normal as need be. I'll use a space suit to protect me during the voyage. If the weight of the superfluous entrails about equals my own weight, the thing will only carry the load it carried in its lifetime. See?"

Walters' mild eyes went wide as he caught onto the idea. "Yes, I see! It's not only crazy—it's tremendous!"

* * *

HOWARD SYKES himself was rather inclined to doubt the practicality of his astonishing plan as the days went by, until he saw the combined work of the physicists and Steve Walters. Between them they cleared out the weird and useless entrails of the object and left only the vital natural organs which utilized radiation. The heart was taken out and a chrome steel substitute operated by batteries put in its place.

The valvular system formerly needed to promote a sluggish circulation was now dispensed with, in that its function was radically altered to operate the numberless organs connected with the natural "transformer" system. When the time for the initial test arrived, Sykes got into his strange new spacecraft and propelled the almost uncanny conveyance at a steep upward angle for nearly two thousand feet, then planed it slowly back to Earth with never a hitch.

Now only a favorable opportunity was needed. It came abruptly one morning, as Howard Sykes awoke from a restless night. He was just in time to see a flock of the rod-shaped bacilli creatures hurtling toward the skies, for all the world like a fleet of distant space machines. The crucial moment had arrived!

It took the Earth official no more than five minutes to scramble into his space suit, fix the helmet, and ease himself inside the narrow interior of his conveyance. The end of the carcass closed over his leaded boots as he lay at full length. His helmeted face was pressed close against the spot where the thing's head had been. Two tiny holes enabled him to see in front of him.

Sykes shifted one of the organisms with his gloved hand. Instantly the carcass lifted, curved in a long arc and swept with effortless ease into the clouds. Sykes swept on through the mist, following close in the wake of the spaceward bacilli horde. At last he caught up with the vanguard and kept within reach. No attention was paid to him. It was clear—the creatures considered him one of themselves.

IT was beyond doubt the most ghastly trip Howard Sykes had ever known, one that called for every ounce of his endurance and courage. The only thing in his favor was that the bacilli objects did not move at a speed too crushing for him to keep up with them. Even so, it was a journey which brought him close to collapse on several occasions. Hardly able to move, stretched out as he was in his cramped position, with naught but all the void around him, he had to resort to restorative pills on several occasions.

He gave up imagining how long he lay there, sometimes half-conscious, at other times torpidly aware that the bulk of Mars was growing ever larger. And then they had arrived—the horde of bacilli was sweeping downward to the familiar landscape of Mars, its surface dotted with the six scientific Zones. In the interval of his absence, Sykes noticed, the destroyed Zones had been rebuilt and repopulated. He turned his

own craft downward, thankful beyond measure that his term of self-inflicted anguish was nearly at an end.

Most of the bacilli headed toward the city as the landscape rose up to meet them. Sykes turned swiftly northward and headed for the specially created pastureland to the rear of the former Biology Zone. Once there, he landed his strange conveyance in the safety of a newly sprouted wood. Here, prying eyes were unlikely to detect him.

Emerging from his craft was like waking up in winter with a stiff neck. The least movement was filled with intolerable pain. His legs were numb, his back and shoulders scourged and taut. By degrees, setting his teeth, he did the thing he had planned.

Sykes drove his strange craft on, in pursuit of the bacilli horde

Pulling out his knife, he gradually slit the carcass wide open, dragged himself out of it little by little. Pins and needles surged through his entire body, set him wincing and gasping; then very slowly he began to recover, eased himself up, sat breathing hard as he tugged off his helmet.

At last he was rid of his suit. Sykes stood up and breathed the first lungfuls of Earthlike air he had known in months.

CHAPTER VII

A Matter of Organism

AS Howard Sykes had anticipated, work for the day had ceased when he arrived in the Zone formerly relegated to biology. From the look of the new buildings, it appeared that engineering work was going ahead. Biological research had obviously been suppressed by the Martian Triumvirate.

Sykes went quickly along the sidewalk, and no particular attention was directed to him by the similarly attired men and women homeward bound. The one thing he did notice, however, was that most of them had changed a lot in the interval. There was a sullen look on their formerly eager faces, a light of rebellion in their eyes.

Possessing no Martian currency as yet, Sykes walked the distance along the pedestrian ways to the city itself, hoping against hope that Dr. Brown had kept his word and allowed Eva Wayne to retain her former apartment. As he strode along he cast occasional glances at the night sky.

Mingled with aircraft were occasional mighty bacilli forms floating against the nearer moon as it scurried on its eternal journey across the heavens. But in the city, things were the same as ever. Lights were on; the workers were following out their usual forms of entertainment. Evidently the Martian Triumvirate had not excluded popular amusement.

The large block of apartment dwellings wherein Eva Wayne resided was apparently unchanged. With a fast-racing heart Howard Sykes entered the building, paused as the armed guard in

the entrance hall barred his way.

"Number, name, Zone, and purpose of visit?" the guard asked mechanically.

Sykes thought fast. This was a new angle. Certainly it had not been in force before.

"Forty twenty-two," he replied at random. "Name, Robert Carfax. Zone of Astronomy. Urgent message for Worker Eva Wayne."

The man seemed to hesitate momentarily, then said briefly,

"Pass. Worker Wayne's room is on sixth floor—Number One Twenty-one."

With a sigh of inward relief Sykes raced to the giant staircase and pelted up the stairs three at a time. His frantic tapping on the door panels of Room 121 brought Eva Wayne herself to open it. She stared at him with a most extraordinary look. Fear, relief and delight seemed to fight for the mastery of her features.

"Howard!" she whispered thankfully. "Oh, Howard—"

He shut and locked the door behind him, caught her in his arms. For a moment or two they were silent in each other's embrace. Then he held the girl gently at arm's length.

"All okay?" he asked anxiously. "Nobody's harmed you?"

Eva shook her blond head earnestly. "No—no, nobody suspects. I risked a lot sending those messages, but so far nobody is the wiser. I'm a worker in the Engineering Zone now. Dr. Brown kept his word. No liberties have been curtailed, as long as I don't do anything 'foolish.'"

She smiled a little twistedly. "Hardest part of the lot was sneaking a mobile radio truck with which to send my messages to you. But I made it—Howard, how on earth did you get here without being detected?"

He drew her down beside him in the wide armchair and went through the account of his experiences.

"And what are you going to do now?" the girl asked anxiously.

HE shrugged. "No fixed idea. I thought maybe you could give me a lead. If we've got to destroy the bacilli in control of Brown and the Triumvirate, how do we start?"

"That'll take plenty of pondering," Eva said worriedly. "The only thing I can suggest is that you disguise yourself somewhat to avoid detection and become one of the workers. Incidentally"—she looked at him in startled surprise—"how did you manage to get past the sentry in the hall?"

"By a fluke, I guess. I told him my number was forty twenty-two and that I was from the Astronomy Zone. This outfit I'm wearing is okay, and so—"

"Forty twenty-two!" Eva cried in dismay. "But—but Howard, there isn't such a number any more! They changed all the numbers of the workers when the Triumvirate came in—and *three hundred* is the highest number! I'm only Number Twenty-two myself. In the Zone of Astronomy, I believe there are even less workers."

Howard Sykes' lips tightened. "Hell, that's bad! Puts us both on the spot. I was caught quite unawares and—"

He broke off startled at a thunderous hammering on the door. Eva looked around in helpless anxiety for some quick hiding place for him, but there was no time. A flame gun slashed the lock and the portal swung wide. Armed officials entered, led by Dr. Brown in his normal civilian attire. He turned slowly to look at Howard Sykes.

"So the sentry was right!" he commented. "I wondered what method you would adopt to get back here, Mr. Sykes. I still don't know how you did it, but since you are here it doesn't matter. Fortunately, the sentry was puz-

zled by your passwords and general behavior. He passed the information on to headquarters and—"

Brown smiled thinly. "You were not very sensible coming straight to this apartment, Mr. Sykes."

"But wait a minute, Doctor!" Eva broke in hoarsely. "Howard—I mean Mr. Sykes — hasn't done anything wrong. All he did was come here to assure himself that I was safe. After all, we are engaged to be married."

"I'm afraid romance does not reconcile the situation," Brown said coldly. "Such an excuse is a ridiculous distortion of fact. Do you think that we of the Triumvirate do not know that Sykes here would give anything to be able to destroy us? Why else do you think we endeavored to stop him from getting back here?

"No, Mr. Sykes, there is only one end to this escapade—and that's the lethal chamber! The same applies to you, Miss Wayne. You were warned at the outset what would happen if you dared to enter into any conspiracy against the Triumvirate."

"Not death for *her!*" Howard Sykes shouted hoarsely. "Good God, man, it's insane! She had nothing to do with my coming here! Besides—"

"Out with them!" Brown snapped, his jaws snapping shut. "Take them to the lethal chamber before they do any more damage. I'll come afterward and view the results. That is all."

Both Sykes and the girl put up a desperate struggle as they were seized by the guards, but within five minutes they were rendered helpless. Half carried, half dragged, they were forced down the long corridor to the ominous steel door of the lethal chamber. Still fighting, they were forced inside, literally hurled into the narrow confines of the enclosed chamber wherein the death sentence would be carried out.

The door slammed; only its tiny grille of glass was visible. Overhead was the yellow bulb, casting a pale glimmer on the two prisoners' haggard, sweat-dewed faces.

"I—I guess this is all my fault," Howard Sykes panted. "That seems to be the appropriate thing to say. My God, Eva, if I'd ever even thought—"

EVA, about to reply, broke off and stared in horrified fascination at wisps of pale blue gas surging in increasing density from the grille under her feet. Below the floor, obviously, the devilish poison gas machine was already at work!

Sykes tried to speak again, but the words stuck in his throat. The vast certainty of death paralyzed his nerves. Eva stood motionless in the haze, striving to keep her courage to the bitter end.

Moments passed and the cloud of deadly gas continued to rise—but the incredible thing was that neither of them felt any different! It was like standing in the midst of cool steam or an ordinary winter fog. At last Sykes turned, groped through the dark, and caught Eva's arm. Very faintly he could distinguish her face in the nearly obscured yellow light.

"Say, what's wrong?" he exclaimed. "I don't even feel giddy yet. How long does this damned gas take to become effective?"

"No idea," she replied quickly. "It's a new sort of gas which the Triumvirate have invented for the rapid killing of traitors to the cause. So far, we are the first who've dared to challenge them; therefore I suppose we are the first to get the gas.

"But—" Eva stopped. "It certainly is not having any effect," she admitted in a baffled voice.

That fact was clear enough a moment or two later. For the flow of gas began

to cease; gradually the mist began to disperse through vents in the roof which had suddenly been opened. The gas, then, was assumed to have done its deadly work.

Howard Sykes said abruptly, "Wait! I've got something! This is the *first* trial of this gas, you say?"

"Yes. Why?"

"And it's an invention of the Triumvirate—in other words, the Martian bacilli working through Doctors Brown, Latham and Poste. The bacilli invented this gas as a destroyer of life—but they've slipped up! They've judged life from *their* standards, not ours! You know, like a horse can eat grass and we can't. All a matter of organisms. This gas evidently kills bacilli but doesn't kill us—"

The girl's breathing came faster. "I get what you mean! But what can we do about it? The sentries and Dr. Brown will come in here after a while, find we're alive, and devise other means to kill us!"

"They won't be here for a while yet, anyway," Sykes said quickly. He dropped to his knees and pulled at the grating in the floor. "Nobody is likely to be below here, either, because of the effects of the gas. There may be a regular arsenal stored below here." Within ten minutes he had smashed and broken one of the gratings and begun to ease himself through the hole into the basement below. Reaching up, he helped the girl down after him.

The light of his small torch revealed the remote-controlled gas apparatus and also the immense underground fortress loaded with all manner of munition supplies, each graded and marked in sections.

"LOOK!" Eva pointed excitedly. "Gas bombs!"

Howard Sykes stared at the vast rack wherein were loaded tens of thousands of pineapplelike objects, each one as large as a duck egg. For a moment or two he eyed them thoughtfully.

"Nice going—if they are composed of *this* gas," he muttered. "I'm going to find out. With me, Eva?"

The girl nodded quickly. Sykes snatched one up, pulled out the pin and hurled the bomb to the far end of the great place. It burst a second later and emitted a cloud of white steamlike fumes. But as the fumes drifted nearer they caused no ill effects, were obviously of the same composition as the poison gas machine had been emitting.

"So in their cleverness they have outsmarted themselves!" Sykes gave a twisted smile. "If they dropped ten tons of these on Earth people, it would have no bad effect—but it *would* destroy every damned bacillus within range! Now it's our turn! Here, stuff up every pocket you've got with these things!"

Eva swung around to the bomb rack and began loading the gas grenades onto her person. Howard Sykes did likewise. Then they both glanced up at a sudden commotion from above. First there was the clang of the lethal chamber's door as it swung open, followed by heavy feet. Startled cries followed, and above them raged the voice of Dr. Brown.

"You damned, infernal blunderers! You let them get away! Look at this smashed grating!" Brown broke off suddenly as Sykes and Eva Wayne stood watching. Brown's face appeared in the hole of the smashed grating and was illumined by Sykes' torch beam.

"They're down here!" Brown yelled.

"Get hold of his hair!" Sykes cried. "Leave the rest to me!"

Eva Wayne grinned a fighting grin and, reaching upward out of the dark, caught Dr. Brown's mop of gray hair in her hands. Brown shouted at the sudden pain, but to shift his head out of

the grating hole was impossible now.

Then Howard Sykes acted. He smashed a gas bomb immediately below Brown's red, startled face. White vapor surged up around the man's nostrils.

From his frantic struggles to dislodge the girl, it was clear that Brown fully expected death. For three minutes, as the gas billowed about him, he fought and struggled. The guards had deserted him at the bursting of the bomb.

Then very gradually the gas began to disperse. The girl released her hold and lowered her hands, stood by watching. Sykes kept his flashlight on, keenly studying the variety of expressions passing over Brown's face. He was obviously baffled and confused. Gasping, he tugged himself free of the opening, sat on the grating floor and shook himself stupidly.

"Well, Dr. Brown, how goes it?" Howard Sykes asked curtly. "Feel any different?"

BROWN looked back into the torchlight glare.

"That's you, Sykes, isn't it?" His voice had the quiet calm of the once great scientist. "What happened just now? I thought— Seems to me that everything's confused. I have a recollection of doing the most extraordinary, horrible things— For God's sake, switch off that torch and come up here!" he finished in exasperation.

Sykes nodded quietly to Eva Wayne and helped her up. In another minute or so they were assisting the baffled, disheveled scientist to his feet. He looked at them in bemused wonder in the yellow light, particularly at their clothes bulging under the bomb load.

"Sykes," he said slowly, "did I dream it, or did I actually condemn you and Miss Wayne here to this lethal chamber?"

"You did just that," Sykes stated quietly. "Only it wasn't you—it was the Martian bacilli in your system that gave the order; that in fact have ordered everything that has transpired ever since this horrible business began. Just now I gassed you, but the gas didn't hurt you any. It was absorbed in your bloodstream, however, and destroyed all the bacilli that have been controlling your actions. Understand?"

"So that's it! Just the same, I don't quite see how—"

"Then I'll dope out the whole thing," Sykes said briefly, and promptly launched into a complete explanation. At the end of it Brown's eyes were gleaming.

"Now I understand!" he shouted, gripping Sykes' arm. "I have been only partly aware of my actions these past few months—like a man working in a dream to an indefinite end. But now—"

Brown took a deep breath. "Sykes, we can turn the tables on these bacilli fiends! We'll gas every one of the Earthmen ruled by bacilli—we'll even gas the whole population, in order to make sure. Root the germs out like the plague they are!"

Howard Sykes nodded vigorously.

"I still remember all I was taught during my period of mental control," Brown went on tensely. "We have been shown vast engineering feats—making the Earth into a Martian spawning ground, for instance. The effect can be reversed; slowly too, so as to cause little damage. We can make Earth normal again—we will destroy every bacillus on Mars and Earth!"

"You've hit the nail right on the head!" Howard Sykes exclaimed. "But listen—these bacilli controllers inside Latham and Poste mustn't suspect what has happened right away. We must marshal our forces for the right moment.

"Therefore, you must remain the Dr.

Brown ruled by bacilli. You will give orders for a supposed invasion of Earth. Space ships will be manned and loaded —but before we set off for Earth, we will attack Mars here. Right?"

"Right!" Brown said enthusiastically.

DR. BROWN played his part perfectly in the days which followed. Howard Sykes and the girl, safe under his authority, returned under a convenient pretext to the workshops. While they were there, they did not continue with their ordinary work: they supervised the marshalling of armed forces under Brown's direction. Ship after ship was loaded and prepared.

The inevitable hitch came when the bacilli in control of Doctors Latham and Poste began to suspect something and started to raise querulous objections. For answer, the two scientists were promptly gassed, became normal again and explanations followed. The Triumvirate of Mars had ceased to be!

When at last Dr. Brown gave the order for the gathered armada to be launched, some five hundred space machines loaded to capacity with gas bombs rained their vapors on Mars from pole to pole. There was never a question of disobedience. Was not Dr. Brown the acknowledged leader?

At first the teeming workers of the six Zones were panic-stricken and thought some new war had descended upon them, until they found that no damage had been done and that they were not in the least hurt. Realization came only to those who had been semi-controlled by the Martian bacilli, and who had now regained their normal health and individuality. By radio, Dr. Brown explained their regeneration clearly and concisely.

The colony realized in a short time that the former system of six Martian Zones would be reconstituted—but on the lines originally planned by the late Dudley Baxter. Dr. Brown nominated six trusted men to control matters in his absence. Then, in company with Doctors Latham and Poste, Howard Sykes and Eva Wayne, he pointed his flagship toward the Earth.

Once the fleet arrived in the vicinity of Earth, the people of the planet feared that the devastating onslaught from the red planet Mars had finally descended. Gradually mass hysteria was dissipated when the people found themselves unhurt, beheld the teeming bacilli in the throes of destruction.

The streets, the fields, the skies above were saturated with steamlike vapor in which the horrible germs strangled and died. First in hundreds, then in thousands, then in tens of thousands and finally in millions.

At the end of fifty-six hours of continued gas bombing, Earth was saturated in drifting vapors from pole to pole. But when the gas finally cleared away, there was no longer a drifting multitude of strange rods and spheres aiming at the elimination of mankind.

Their work done, the fleet from Mars descended to New York. The first person Dr. Brown, Howard Sykes and the rest met on the steps of Earth headquarters was Steve Walters, his long face a study in dazed amazement.

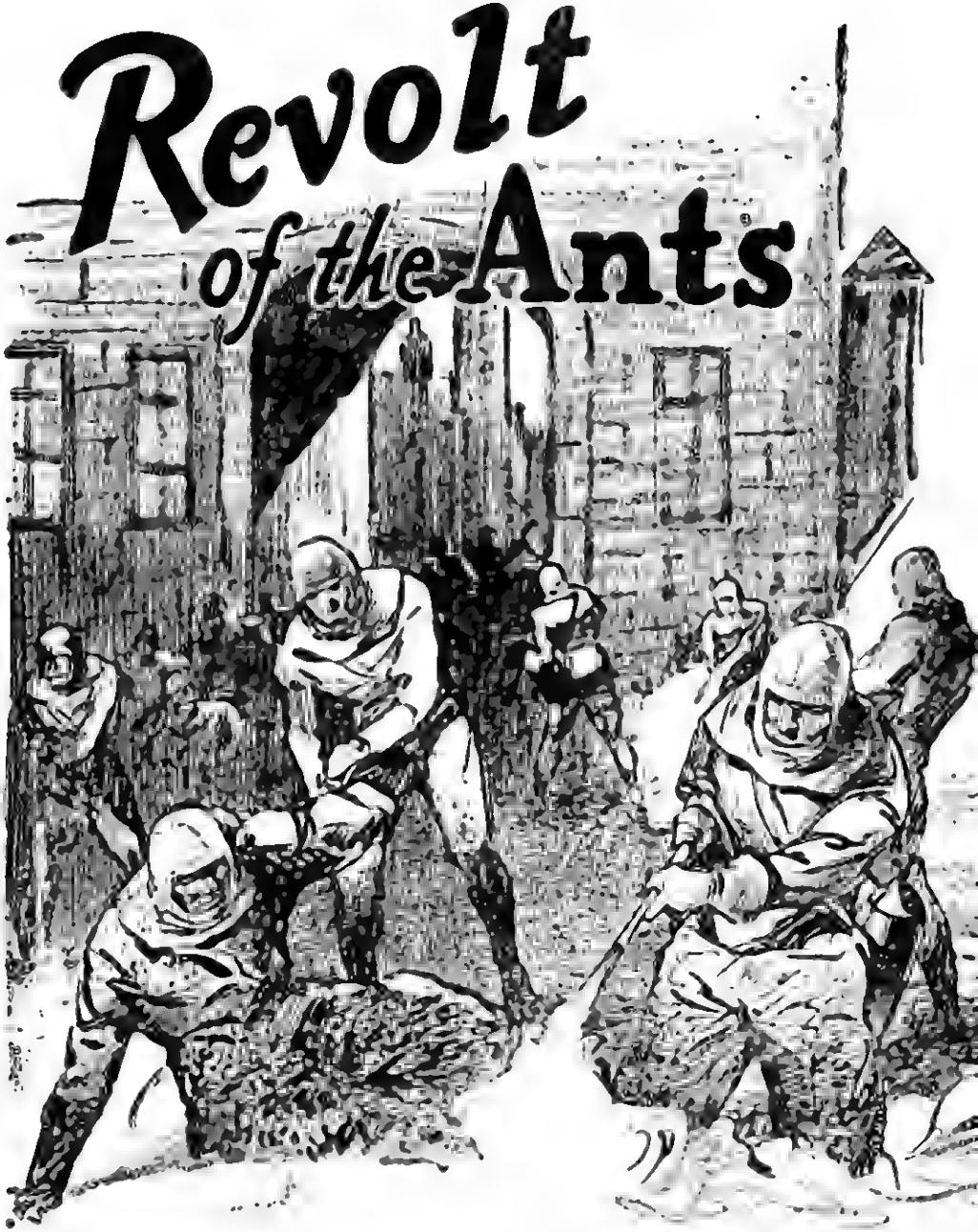
"Howard, what happened?" he demanded. "What did you do? You destroyed every bacillus—but how?"

Howard Sykes smiled as he gazed at the carcass-littered streets.

"Gas," he said calmly. "It's the end of the bacilli, the return of the Zones, and the gradual restoration of Earth to its former state. Now it may be said that man has definitely and absolutely conquered the last menace he is likely to encounter. Eh, Dr. Brown?"

The scientist shrugged. "Maybe," he said. "It's a big universe—"

Revolt of the Ants



By Milton Kaletsky

TO Washington came millions of ants, to demand the right to vote. Met with refusal they went to the Supreme Court. What would it decide . . ?

SOMEWHERE outside the office of the President of the United States an unusual commotion was disturbing the customary White House quiet. People seemed to be rushing about, stamping their feet heavily and shouting frantically and incoherently.

As the President arose to investigate the uproar, a group of violently agitated men burst into his office and dashed about, leaping up and down, stamping and gesticulating excitedly. Greatly surprised, the President recognized several gardeners from the White House grounds, the doorman, his own private secretary and other officials, apparently afflicted with mass insanity.

In a moment, he discovered the reason for their mad antics. They were trampling on ants, hordes of ants, thousands of ants, which were pouring through the door.

Up the walls to the ceiling swarmed

Armies of men armed with spray guns met the attack of millions of ants, but the defense was futile

the ants, leaving behind hundreds squashed on the floor, and the panting men paused to regain their composure.

"What's this all about?" asked the President, his handsome, careworn face marked by curiosity.

"I don't . . . know, sir," puffed his secretary. "These ants . . . invaded . . ."

"Yes, sir," spoke up a gardener. "We saw them come marching along like soldiers, heading right for the main entrance. Tried to stop them but they scattered and ran."

"Came right through the windows when I shut the doors, sir," offered the doorman. "Just couldn't head them off, there were so many."

The President's secretary frowned at the army of ants crawling about safely above their heads and then glared suspiciously at the gardeners. "This looks like someone's silly practical joke!"

Loud protestations of innocence agitated the atmosphere. "No, sir!" "We ain't responsible!" "I tell you they came here by themselves!" *"Look—!"*

All eyes swerved to the place indicated. On the ceiling the ants were arranging themselves into letters and words. While the amazed men stared incredulously, the insects lined up to form the word "Greetings!"

A moment after, they reshuffled themselves and formed two sentences. "Please do not molest us. We wish to see the President if he is not busy."

"I'm going nuts!" moaned someone. "I'm seeing things that can't be. 'Omigawd!"

This outcry was produced by the ants' rearranging themselves again into a new message. "If you wish to communicate with us, write on a piece of paper and put it on the floor."

THE first to recover from the general stupefaction was the President. With a smile of interest, he suggested, "Let's try it."

"But it's just somebody's foolish joke," his secretary repeated.

"If it's a joke, it's a good one and I'll see it through," remarked the President. On a blank sheet he printed, "I am the President. Who are you and what do you want?" Stooping his tall, slender figure, he placed the paper on the floor. Several ants immediately detached themselves from the others and crawled down and over the paper slowly. Then they climbed back, went into a huddle with their companions, rubbed antennae together vigorously, separated and took up positions in new words.

"We are a committee representing all the ants in the United States." After a quick redistribution, they continued, "And we have come to demand the right to vote."

A confused babble burst from the assembled men until the President raised his hand for silence. "Let's find out all we can," he declared, and wrote on another sheet of paper, "How is it you understand our language?"

After crawling on the writing to absorb its meaning, the ants replied, one sentence at a time. "Being very intelligent animals, we learned to read and spell by examining children's elementary reading books and dictionaries we found in a junk pile. Of course, we cannot speak or hear your voices, hence the need to communicate through writing. Now that we are literate, we demand our rights as native born American citizens and wish to participate in the government. This demand is also being made in eacl. state legislature and in every city and town by other ants."

The President turned to one of his assistants. "Call the news services and check on that."

Meanwhile his secretary was scribbling furiously, "But you're not human

beings!"

To this the ants calmly answered, "We have read the constitutions of each state and of the federal government, and nowhere do they restrict the right to vote to human beings exclusively."

"That's correct," chuckled the President, amused by his aide's discomfiture. "But there's a way around that." He wrote, "The constitutions specifically speak of 'persons' when talking of suffrage. Dictionaries define a person as a human being. Now, as you are not human beings you are also not persons, hence you cannot vote under present laws."

The ants pondered this a while. From their long conference emerged a reply. "That point will have to be adjudicated by the courts. Can you recommend a good firm of attorneys?"

"Well, of all the damned insolence!" gasped the secretary.

His spluttering comments were interrupted by the telephone. Still mumbling wrathfully, he listened to the message, his face running through all the colors of the rainbow.

"Same thing everywhere!" he exclaimed, banging the phone down disgustedly. "Ants demanding suffrage. Millions parading in the streets. Pfah!"

The President was frowning in deep thought. "So it's not a joke. We're up against something mighty big here, and the Supreme Court will have to render a decision without delay. Better get the Attorney-General at once."

His secretary paced nervously about the room. "Ants outnumber humans by millions to one," he protested. "Giving them votes would make us a tiny minority group. They'd control the country!"

Seizing a piece of paper, he scrawled, "What do you intend to do if you receive suffrage?"

"We have long been dissatisfied with the inefficient and wasteful social and economic organization of you so-called civilized people," said the ants. "With all your science, you are becoming more and more confused, inept and incompetent. When we control this country, we will establish an orderly, intelligent society such as we ants have had for many millions of years."

"But damn it!" scribbled the secretary, "we've never interfered in your lives. Why the hell should you butt into ours?"

The ants' answer was simple and succinct. "We have a mission to reform you."

The secretary swore vigorously. "Your ant civilization is not perfect. You have wars and slaves."

Unhesitatingly, the ants replied. "True. But our wars are really humane wars, without poison gas or secret treaties or bombing of civilians. And our slaves are not only well treated but they could not live at all if we did not take care of them."

A hearty laugh broke from the President. "They have an answer for everything. That's more than we sometimes have."

Continuing, the ants said: "We are excellent engineers, architects, agriculturists and herdsmen. We are far better economists than you because every ant has a job and enough to eat. We live together without laws, courts and police. We ants have no drunkards, thieves, politicians or lunatics; no moral troubles, no poverty, no swing bands, no fake stock salesmen and no taxes. We actually practice what we preach. Can you humans say the same? You will never eliminate all your faults and defects by yourselves, so we must do it for you. Good day."

Their indictment of human society completed, the ants climbed out the windows and disappeared.

IN the ensuing weeks, the American people gradually recuperated from the shock of the ants' demands, which at first they regarded as a huge joke and then accepted as a matter of the greatest seriousness. Everyone's attention was held completely by the lawsuit in the Supreme Court, which set aside less important matters to give immediate consideration to the most portentous case ever to come before it: *Formica Hymenoptera,* the common ant, appellant *vs. the United States of America,* respondent.

On an historic Monday in July, the Court handed down its decision. A majority of six concurred in the Chief Justice's brief but weighty statements:

"Insofar as the accepted dictionary definition of a person as a human being is concerned, we are inclined to regard that definition as purely arbitrary and much too narrow. The Latin source of this word, *persona,* meant a face mask used by actors to help them assume a certain character. Hence the complete and broadest meaning of the English word *person* is a character, an individual, especially a sentient and intelligent individual.

"Regarded in this light, the word *person,* as used in state and federal constitutions and in state and federal laws governing the suffrage, must be extended to mean any individual capable of using the suffrage. Indeed, we find that such was the intention of the framers of these constitutions and laws, i.e., to grant the right to vote to anyone who could use it intelligently and honorably.

"That ants can so employ suffrage is beyond doubt. Their civilization is far superior to human civilization in many respects, as has frequently been described by human writers.

"The argument that ants are not citizens is without foundation. Those that are born on American soil are automatically citizens and as such are entitled to all the rights, privileges and prerogatives of citizenship.

"Moreover, it is a fundamental principle of our government, a principle arising from a great civil war and embodied in the Fifteenth Amendment to the Constitution, that the right to vote cannot be denied to any citizen because of race, creed, color or previous condition of servitude.

"In view of these considerations, the decision of this Court is that there is nothing in any statute barring ants from exercising their constitutional right to vote.

"The appellant is upheld."

BURSTING upon an anxiously waiting nation, this decision set off an explosion which had slowly been brewing while the lordly human beings brooded over the insolence and conceitedness of these upstart ants. Everywhere in the press and on the radio and on street corners the Court was denounced for destroying human rights. In spontaneous demonstrations of respect for law and justice, enraged gangs raided and wrecked the homes and offices of the lawyers who had presented the ants' case. Other furious mobs went about jumping on every ant visible.

Groups of ants swarmed over the late afternoon papers, absorbing the headlines, and then raced away to spread the good news among their compatriots. Some hours later, a delegation of ants called on the President, bringing with them a number of bees and termites. They found the President and Cabinet in grave consultation with Congressional leaders. Of all the men, only the President seemed unperturbed. While the rest puffed and snorted and hissed like so many steam engines, the President appeared to be enjoying himself.

"Greetings to all!" saluted the ants.

"Allow us to introduce our noble fellow creatures, *Apis Hymenoptera,* otherwise known as the bees, and *Termitdae Neuroptera,* the termites. They too wish to benefit by the Supreme Court's decision."

Angry mutters and mumbles erupted from the assembled officials. "Ridiculous!" "Damned impudence!" "I say to hell with them!" "Just let me get at them with a fly swatter!"

Ignoring their wrathful remarks, the President wrote, "All right. But first you must answer a question. Do you intend to obey all the laws of cities, states and nation, as is expected of good citizens?"

After crawling over his query, the ants, bees and termites promptly formed a huge "Yes!"

"Good," scribbled the President. "I shall at once send a message to the Congress requesting extension of the suffrage—."

The Secretary of War grasped the President's hand. "It's impossible!" he exploded. "It's . . . it's insane! We can't give them control of the country."

Unanimous agreement was expressed by the other cabinet members, while Representatives and Senators muttered they'd see those damn bugs in hell first before they voted any such thing, no matter what the Supreme Court said.

"Gentlemen, please!" smiled the President. "Let me finish." Quite calmly, he continued writing: " . . . extension of the suffrage to any ant, bee or termite who reaches the legal voting age of twenty-one years."

He placed the paper on the floor for the ants to read. Immediate consternation was clearly visible. The insects clustered in a palpitating heap from which they emerged only after a protracted consultation, forming an agonized protest: "But we don't live that long!"

The President grinned and turned to the Secretary of Agriculture. "How long do ants, bees and termites live, Bill?"

Sudden comprehension flooded the Secretary's face as the other men present joined in a loud guffaw of relief. Through the delighted jabber, the President's voice laughed, "I anticipated all this when Department of Agriculture entomologists told me that these insects never live more than a very few years."

SLOWLY recovering from their dismay, the insects reformed their lines to ask, "Couldn't the laws be changed to grant the right to vote to anyone half a year old? We're fully mature at that age."

"Sorry," replied the President, "but that would make voters out of millions of human children who are not yet able to vote intelligently. The law must stay as it is. It's up to you to conform to the law, if you can."

Once again the insects huddled together. That a furious debate was in progress among them was apparent from the agitated waving and rubbing of antennae. Coming out of conference, they rapidly lined up to issue a formal declaration and ultimatum:

"Whereas, human beings have shown themselves to be tricky and untrustworthy; and

"Whereas, human civilization is only a few thousand years old, while insect civilization is millions of years old; and

"Whereas, there are only 2,000,000,000 human beings alive at present, while the number of ants, bees and termites is more than 354,749,127,483,010,562,197,106,000,000,000,000; and

"Whereas, ants, bees and termites are noble, honorable, efficient and intelligent; and

"Whereas, human beings are incompetent, stupid, ignorant, uncouth, inept

and befuddled;—

"Therefore the rightful lords of creation are not the human beings but the aforementioned ants, bees and termites; and

"Therefore the high and noble alliance of *Formica Hymenoptera, Apis Hymenoptera* and *Termitdae Neuroptera,* otherwise known as ants, bees and termites, hereby declare that a state of war exists between them and the genus *Homo Sapiens,* otherwise known as man."

And leaving their stupefied audience to gurgle and gasp at these statements, the allied insects turned and marched out, with dignity and decorum.

WITHIN a day, the war began in earnest. Hordes of ants descended upon the cities, invading them from every direction in overwhelming numbers. Wherever they encountered a luckless human, they swarmed up his or her legs, biting and chewing away lustily, while the agonized creature danced and slapped crazily. Millions of ants perished in these hand-to-hand encounters, but millions more arrived daily.

Then came the bees, stinging at everyone they could catch. Each sting meant a dead bee, but there were millions of bees. Usually they stung only that part of the human anatomy which was most stingable and which was most painfully recalled each time the person sat dawn, although they also stung other parts when they would be annoying. Thus, in one city, a candidate for a public office had to cancel a scheduled speech because a bee had stung his tongue. The citizenry of that town, though suffering from countless stings, issued a proclamation of thanks to the unknown heroic bee for its public service.

Then the termites arrived, to do sapping and undermining. From house to house they traveled, and when they departed no chair or table could be trusted, for the termites so cleverly chewed away legs and supports that the weak spots could not be detected until the furniture collapsed. Baseball games everywhere had to be cancelled when the termites ate the bats into uselessness. In one town, a great, dignified virtuoso appeared before thousands of eager, expectant music lovers, sat himself down before his five thousand dollar piano, gracefully struck one resounding chord, and most ungracefully crashed to the floor as the bench gave way. Another bench was brought, he reseated himself, struck again the resounding chord, and this time the piano collapsed, with a heart-rending, discordant twang of all its strings.

IN between raids, the insects propagandized. Wherever they could be seen, upon walls and on the streets ants gathered into slogans and battle-cries:

"Vote for Ants!"

"If Women Can Vote, Why Not Ants?"

"If You Don't Want Ants In Your Pants, Vote for Votes for Ants!"

And the bees flew overhead in similar formations:

"Be Good to the Bees and the Bees Will Be Good to You!"

"Votes for Bees or Stings for You. Take Your Choice!"

"If We Get Suffrage, You Won't Suffer!"

And the termites chewed out other appeals on wooden fences and walls:

"Termites Want Rights!"

"We Fight for Right
By Day and Night!"

"If We Get Our Rights,
You Won't Get Our Bites!"

During the early days of the conflict, when human resistance was haphazard

and ineffectual, the insects won victory after victory. Then rapid organization transformed the nation into an efficient fighting force, evening the balance of power. First protective measures were adopted. Men and women abandoned their traditional clothing, which left too many openings for the insects, and adopted breeches with tight boots, coats with tight sleeves, thick gloves and heavy nets covering the head. To meet the enormous demand for such articles, the Government commandeered all clothing factories and put them to work at maximum capacity, while squads of chemists sought means of making cloth impervious to bee stings.

Then came counter-attack! Declaring a national emergency, the President assumed control of all industry and set it to manufacturing millions of spray guns and tons of insecticides. Within a month, everyone was armed with a spray gun. Department stores featured a dainty little half-pint model with gem-studded handle for milady's evening use, but most people preferred the more substantial two-quart size, complete with belt and a gallon of insecticide, $2.98. After some experimentation, the War Department brought out a much more efficient multi-fire spray gun with a dozen nozzles which shot the liquids in all directions. Also popular was a battery-powered gun with a motorized pump, guaranteed to surround its owner with an impenetrable shower of bug-killer. Every filling station added a tank of insecticide to its row of gas tanks.

When this counter-attack was launched, the ants sent a delegation to the Secretary of State, protesting that insecticide sprays were the equivalent of poison gases and as such were outlawed by international agreement. The delegation was gruffly dismissed by the Secretary who reminded them they had deliberately begun an aggressive war without provocation and that therefore any and all measures of defense were permissible. The ants departed, threatening dire consequences.

The consequences were a change of tactics. Abandoning daylight sorties, the insects concentrated on night attacks, when people laid aside their guns and went defenselessly to bed. Then in charged the ants and bees to plunge joyfully upon the sleeping figures. Often their dastardly deed was done and they were retreating in good order before the victim was fully awake. It became necessary to sleep in tightly shut rooms with all cracks around doors and windows stuffed. At last, manufacturers of air conditioning apparatus enjoyed the boom they'd been expecting daily for thirty years.

But now the termites swung into action, boring holes througth walls and doors for the ants and bees. To the other woes of embattled America was added enforced insomnia.

The war was waged on many other fronts also. Some towns surrounded themselves with layers of high voltage wires placed on the ground. These took great toll of ants and termites until they learned to cover the wires with dead leaves which acted as insulation and enabled them to cross unharmed.

Then deep moats filled with insecticide were dug around the cities. The insects promptly tunneled underneath and emerged on the inside bristling with as much martial fever as before.

Groups of men searched for ant hills, termitaries and bee hives and destroyed them with all inhabitants, including eggs and grubs; whereupon the insects fled into forests and swamps. There, well hidden, they avoided battles until they prepared their own offensives.

Most dangerous enemies were the

bees, who acted as shock troops, heavy artillery and air fleet combined. To starve them out, billions of flowers were burned, but with very little effect.

In all cities, towns and villages, air-raid sirens were installed and lookout stations were established on the outskirts. When approaching swarms of bees were sighted, up from the nearest airports rose squadrons of army airplanes armed with great power-driven spray guns to give battle, while in the towns the sirens wailed, warning everyone to rush indoors to sanctuary. As the bees came crawling down chimneys and through cracks and gaps in doors and windows, *swoosh! swoosh! swoosh!* went hundreds of spray guns as thousands of bees bit the dust. But they kept coming and coming and coming until the guns were exhausted; and then it was their turn to swarm up on the slapping, squirming, wailing humans until they found openings through which they could sting and sting and sting till the unfortunate men and women were reduced to moaning wrecks, groaning for arnica and alcohol and ammonia water and menthol. Drug stores laid in vast supplies of these soothing medicines, but an ocean of menthol would not have eased the aches and pains of suffering humanity.

THROUGHOUT the war, the insects concentrated especially heavy attacks on a few people, the leaders of capital, labor, politics and religion, whose influence could sway public opinion. These were harassed to their wit's end, despite careful protection by numerous guards armed with the largest and most deadly spray guns. After each assault and before retreating, the insects momentarily formed themselves into messages offering to spare the victim further attacks if he would promise to fight for insect suffrage.

But the persistent attacks had just the opposite result. These national leaders grew more and more determined never to surrender and to fight to a finish. Faced with this common enemy, they forgot the issues over which they had previously battled fiercely and drew together to aid each other against the insects.

Sensing this growing feeling of the brotherhood of man, the President summoned a great conference of all opposed parties to join in a united front against the common enemy. The day of the conference was an historic occasion. Lifelong political opponents posed for photographs together. Democrats and Republicans sang "For he's a jolly good fellow!" to each other and got drunk together and swapped remedies for bites and stings. All differences and quarrels were forgotten as radicals and reactionaries, liberals and conservatives, employers and employees alike rallied to the common cause.

Up before the friendly gathering of the nation's notables arose the President, amid tumultuous cheers. Rapping for silence, he spoke joyously and pointedly.

"Ah, my friends, if we can thus forget party lines and class interests when faced by a common enemy, why cannot we do likewise when battling those other enemies we call economic problems, which have defeated us for so long?"

Uproarious shouts of approval and deafening volleys of applause thundered through the chamber. "We can!" "We will!" "We're all behind you!" "Atta boy!"

When the tumult subsided, the President continued. "It has been said that a little child shall lead them. Well, today a little *bug* shall lead *us* . . ."—he paused, waiting for the laughter that rippled over the multitude to abate—

". . . shall lead us to a new era of brotherhood and universal good spirits and united effort for everyone's good! And after we win this war, we will go right on working together until we solve all our other problems!"

A roaring chorus of cheers reverberated from wall to wall, and the President thrilled at the wonderful demonstration of amity and harmony and willingness to cooperate.

With a tremor in his voice, he went on: "Then here is what I propose that we—"

A terrific shriek ripped through his words. *"Ants!"*

IN through the open door poured a vast mob of ants and bees and termites. All over the auditorium, men swore and hastily reached for their guns, but the insects quickly swept up onto the walls and formed into a friendly greeting.

"Peace! We want an armistice."

The hubbub faded to a mere clamor. All eyes stared fixedly at the announcement appearing above their heads:

"Peace! The Grand Supreme Council of Ants, Bees and Termites has a message. To wit:—

"Whereas, in four months of war the number of ants, bees and termites has been reduced almost to half; and

"Whereas, it is now clear that you human beings wish to persist in your foolishness, wastefulness, inefficiency and general incompetence; and

"Whereas, you have consistently failed to appreciate our sincere efforts to reform you and show you the error of your ways; and

"Whereas, our anthropologists have just proven that on the evolutionary scale man is only slightly higher than the bacteria, so that human beings are not worth saving anyway,

"Therefore be it decreed that the ants, bees and termites shall hereafter mind their own business; and

"To hell with you."

Having delivered this expression of high regard, the insects reassembled into military formation and marched away forever.

Astonished silence reigned over the flabbergasted gathering a full minute. Then up leaped a prominent leader of the opposition party.

"A fine thing it is for human beings to be insulted by a bunch of insects! By bugs!" he bellowed. "And who is responsible? *You!"* He pointed an accusing finger at the President. "You and your fumbling and your hesitation! Now if *my* party had been in power, we'd have won this war in a week!"

"That's a lie!" shouted an Administration Senator. "It was you who spoiled everything because you wouldn't cooperate!"

"Ridiculous! I demand you retract that!"

"I'll retract nothing, you fathead!"

"You bum! I'll kick your ribs in!"

"Sock him! Atta boy!"

"Down with them!"

"Who hit me? Listen, wise guy—"

"Why, you—!"

"I'll mow you down!"

"Yeah, you and what army—*ow!"*

Through the wild turmoil came the President's ineffective appeal for quiet, a mere sigh in the storm. In a second the hundreds of sedate, dignified ladies and gentlemen were transformed into kicking, screeching, punching, scratching hoodlums. They scarcely knew why they were fighting but they had to do something to relieve their feelings. And so the brief era of good spirit ended in a free-for-all that made pandemonium seem halcyon.

Brotherhood broke up in a riot.

The United States was back to normal.

Mary Buree screamed in agony as the crystals touched her foot and red flames spurted from her ankle

The pirate ship was Earth's only hope of victory. Carver had to capture it even if it meant Ann Mitchell's death

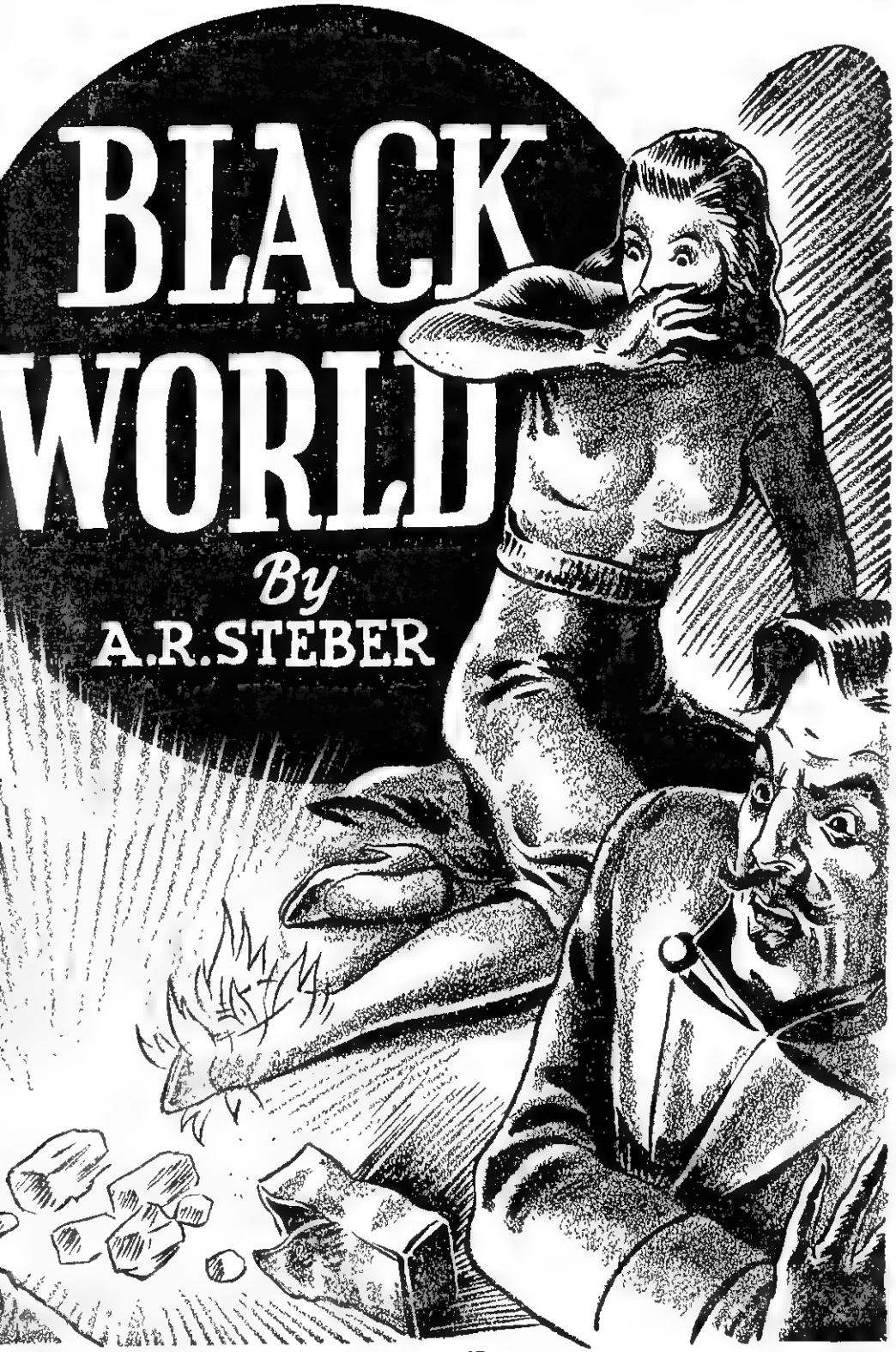
Concluding Installment

(See page 88 for synopsis of preceding chapters)

THE magnificent jaggedness of New York's skyline mirrored itself in miniature in John Carver's clear gray eyes, narrowed now with a frowning concern as they swept slowly over the panorama of the city.

Before him, spreading out from his position on the broad sweep of steps which formed a gleaming marble approach to the Federal Building, lay the sprawling yet contradictorily towering ramparts of the solar system's largest metropolis.

New York's colossal towers etched themselves sharply against the turquoise blue of the clear noonday sky on the nearer horizon, the whole panorama wavering to indistinctness with


BLACK
WORLD
By
A.R.STEBER

the mist of distance on the rim of vision.

War! With Venus. What would it mean?

He pictured the towers crumbling, the sprawling of the city no longer contradictory; visioned the lovely blue of the sky veiled in smoke, clouded by poison gas; imagined the metropolis ripped by bursting rocket shells, livid with violet electrical flames.

Carver shook his head worriedly and descended the steps. Two years had passed since the shock of that hour when he realized that Ann Mitchell had gone, leaving behind her a heartbroken "goodbye."

Time and again a ship had fallen prey to the girl pirate, mute evidence that Ann Mitchell was determined to carry out to its forefated conclusion her threat of vengeance on the United Spacelines for the great wrong the many-tentacled corporation had done her father.

Always fate seemed to thwart John Carver's search for the girl. For two years he'd been taking passage on space-freighters, hoping to be aboard one time when the girl raider struck. But on every occasion their paths had failed to cross.

Carver swung his hard, space-browned body powerfully from the last step and turned into the crowd. Then abruptly he halted, frozen, while his eyes widened incredulously.

"Ann!"

Urging his momentarily paralyzed form into motion, he leaped after the unmistakable flame of auburn-red hair that topped the head of the slim, curved feminine form, tripping lithely with amazing nonchalance into the throng of people.

"Ann!"

He reached her and gripped her curving arm in his fingers, turning her about. The girl pirate's warm amber eyes widened in spontaneous, glistening joy as they centered on his face.

"John!" she choked happily; then slowly her face clouded and the joy faded from her misting eyes.

He held her tightly, as if fearing she would vanish, wraithlike.

"Ann," he breathed. "If you knew how I've searched for you!"

"I know," she said. "I heard you quit your job with Stellar Patrol, and I knew why you must have done it."

He eyed her reproachfully. "You knew, and yet—"

TEARS sprang into her lovely eyes. "How could I?" she answered. "Oh, John, let's not bring that up again. I'm wanted for piracy—"

Carver's tensed fingers on her arm in tight pressure suddenly halted her words, and he glanced about, startled.

"Ann! What are you doing here? They'll catch you!"

"I am Ina Malden, on Earth, and she has every right to walk the streets of New York. And yet," her voice took on a double tone, "I think this will be

SYNOPSIS OF FIRST INSTALLMENT

John Carver, Stellar Patrolman, on a mission to Pluto with Professor Caldwell on the British spaceliner Josephine, meets Ina Malden, interplanetary sportswoman. She disembarks at Titan. Later a mystery pirate ship loots the Josephine. Carver recognizes Ina as the leader. Caldwell is abducted by Ina. Carver pursues in the patrol ship, which was carried aboard the Josephine. Out in space, Franco Magra, member of Ina's pirate band, boards his ship and captures him. Carver turns the tables, lands on Pluto, secures Magra in a cave in the Ice Mountains, and goes into the pirate hideout to rescue Caldwell. Amazingly, Caldwell refuses to be rescued. Escaping, Magra overcomes Carver and he is kept prisoner. Drafted by the pirates to help secure some of the dreaded disrupters, malignant metallic elements, from a meteor crater, Carver escapes, captures Ina Malden, and starts back to earth. She makes love to him, gets his gun, and radios Caldwell to rescue her. Carver is allowed to go free and returns to Earth thinking Caldwell a traitor. Now go on with the story:

the last time for me here."

"Why?" His voice was tense.

"Spacelines' agents are on my trail. They suspect, I am sure. Tonight I leave, to return to Pluto."

John Carver retained his grip on her arm and swung her back into the crowd.

"Come with me," he said, "to my office, where we can talk without fear of interruption. I have something I want to talk about seriously."

IN his office Carver faced the girl, scanning her lovely features closely while he marshalled his thoughts for the persuasive argument he was about to launch. She regarded him quizzically, her slim fingers toying with one another as she sat, her beauty seeming to increase the sharp contrast with the grim plainness of the office furnishings.

Abruptly Carver advanced, caught her erect and drew her to him, his eyes close to hers.

"Ann, I love you! I want you. You must listen to me."

She tried to push him away, a strange fear in the amber depths of her eyes, a fear that he instinctively felt was fear of herself. He pressed his advantage.

"Ann, kiss me!"

She sobbed. "I do so *want* to—"

He lowered his head and pressed his lips against hers. For a moment they remained immobile, then all at once they melted, and she clung to him. When they parted, he smiled down at her. It seemed a victory.

"Ann," Carver began softly. "Why can't Ina Malden become Mrs. John Carver? Even if Spacelines suspects, they can't prove anything. We can be married and live out our lives as they should be lived, and no one will ever know—"

Ann's face hardened, and a hopeless look came into her eyes.

"No, John, it can never be. We wouldn't be happy, as you picture. Always over our heads would hang the fear of discovery, the fear of being torn apart. Piracy is punishable under maritime and space law by death.

"Even if we could evade the law by making full restitution, and by taking advantage of the leniency of American courts, there remain the English courts, extradition, and trial for murder—and there'd be but one outcome to such a trial."

"Yes," Carver admitted, "that would all be true, *if they had Ann Mitchell on trial!* But it will be impossible to prove that *you* are the girl pirate. Married to me, you would be perfectly safe."

She smiled sadly at him and shook her head.

"If you only realized how wrong you are. You forget the most important thing."

"And that?"

"None of Arnold Mitchell's band has ever turned traitor—ever broken their vow to avenge my father, to break Spacelines. They're a jealous band, especially"—her face darkened—"especially Franco. I'd always be afraid of him. No, we could never keep our secret. Too many know."

"But why does that mean they'd reveal your identity? They could continue their plans without you."

Ann shook her head. "No. I'm the only one who knows the vital secrets of all the inventions of my father—inventions that are absolutely necessary to the completion of the plan. Even the secret of the mystery ship would be hard for them to understand. It would be impossible to build more ships without these vital secrets.

"So, when they had garnered wealth enough to start the competing line that would ruin Spacelines, they could build no ships without my help. And I could not help, and at the same time remain

true to you. Your conscience would bind you to your sworn duty."

"Duty!" Carver exploded. "I'm not in the Stellar Patrol any longer!"

"You talk much differently now than you did out there on Pluto two years ago," Ann said.

"I was in service then!"

"And now too," she pointed out. "War is brewing—"

"Has come!" he interrupted.

"Yes, and it will surely affect you—will affect all trained men. You could not be a traitor. Later you will realize it. And the war is another reason why I must continue my plans—why I must go back to Pluto immediately—"

A knock on the outer door startled the girl into frozen silence. Her face paled and she crossed the room to the inspection panel, which admitted of a clear view without revealing to persons outside the fact that they were under scrutiny.

"Oh!" she gasped.

"Who is it?" Carver questioned anxiously.

"A Spacelines agent!"

THE blood drained from John Carver's face and his chin grew rocky firm, tight-muscled.

"Quick, into this room!" He shoved the girl hastily through a door and closed it. Next he strode purposefully to his desk, opened a drawer and made sure his gun was within instant reach. Then he answered the door.

"Mr. John Carver?" questioned the man who faced him.

Carver nodded. "Yes."

"I'm Arthur Wiegand, representing Spacelines. I've come to see you on a very important matter."

Carver hesitated, then his face got stony.

"Come in," he said shortly.

Wiegand entered and seated himself in the cushioned chair from which Ann had just fled to her concealment in the next room. Carver glanced once at the door to make sure it was closed, and frowned a bit as he saw that it was slightly ajar. He had no doubt that the girl had opened it thus, so that she could hear.

He seated himself across the desk from Wiegand, his hand on the drawer where reposed his weapon.

"Go ahead," he said, "you can get down to business."

Wiegand hesitated, while he scrutinized Carver's bronzed features closely. Abruptly he spoke.

"You are the only man who has ever seen the girl pirate!"

Carver started, and his knuckles whitened with his grip on the handle of the drawer.

"And—" he questioned menacingly, tautly.

Wiegand shrugged. "We of Spacelines know only what you made public when you returned without Professor Caldwell from that secret research voyage for Mellon. Professor Caldwell has never been heard from. We know you mustered out of the Stellar Patrol to conduct a search for someone, something; a search which has never been successful. Was it for Caldwell?

"But whatever it is, we have no desire to pry into your private affairs. My errand here is of a different nature. I merely mention these facts so that you will understand *why* I come to you."

"I still don't get what you're driving at," said Carver shortly.

"But you will when I tell you *what* we want."

"And that is—"

"We want the secret of the mystery ship!"

Carver leaped to his feet. "Man, you're crazy!" he exclaimed.

Wiegand rose also, his lean features tense, and his face hard.

"Carver, you *know* where the girl pirate's hideout is! The story you gave of the abduction of Professor Caldwell was fictitious, made up for some good reason of your own! Our investigators made sure of that. What other marvels beside the ship you observed that caused you to keep the real truth obscured, I do not know.

"I don't blame you for trying to get these secrets for yourself. It is not that about which I'm concerned. My errand is of much more serious nature. It has to do with you, with me, with all of Earth people."

"What in hell *are* you driving at?" Carver demanded suspiciously, again seating himself.

Wiegand sank back also. "War!" he uttered succinctly.

"You mean—"

"I mean that Earth, all of us, are in dire danger of defeat, which will mean virtual slavery under the vice-lords of Venus, unless we can secure some armament, some weapon, that will strengthen our defense and our *attack!* With ships like the mystery ship, we would be invincible. We could crush the enemy!"

Carver stared at Spacelines' agent, the beginnings of an idea starting to surge through his mind.

WIEGAND continued: "We know you are aware of the pirate's hideout, and we are willing to provide you with the most modern and efficient ship at our disposal, so that you may make an attempt to secure the secret we *must* have. It is not a matter of being in our employ. It is a duty to your country, to your planet; an obligation that no true citizen can disavow."

Carver's lips curled a bit at the man's words. Spacelines was ever wont to prate about duty and patriotism when their own hides were endangered by war. But he dismissed this thought for the idea that had now developed fully in his brain.

"I understand that," he said, "and if it were only for the company, I'd refuse. But I realize perhaps as much as you do the seriousness of the war—in fact, I have just come from the Federal Building."

"Then you'll do it?" asked Wiegand eagerly.

"Yes," Carver nodded, "I'll do it."

Wiegand leaped to his feet and extended his hand across the desk.

"Great, man! And if you succeed, Spacelines will see that you are well rewarded."

"I was just getting to that," said Carver dryly. "But the fact is, I'm not looking for monetary reward for duty."

"What then?" asked Wiegand. "Position, an appointment—"

Carver shook his head. "No. My request is simply this. I want the grant of one small favor, a favor that Spacelines can easily give, and which will cost them nothing."

Wiegand smiled. "Mr. Carver, you can depend on Spacelines to grant any request you make—if you succeed."

Carver rose to his feet. "Then you can count on me. I'll not guarantee results, but I'll do my best. And I'll call at your office to arrange details later."

When the door had closed behind the Spacelines agent, Carver strode to the other door and flung it open.

"Ann!" he exclaimed. "Ann! This is our chance!" He halted in startled amazement, then leaped forward and swept his gaze about the whole interior of the room. It was empty.

"Gone!" he gasped. "She's gone!"

On the desk in the center of the room he saw a small square of white. A note, hastily scribbled. He snatched it up

and scanned its few short sentences:

John:

More than ever I realize now that conflicting duty is the barrier between us—my sworn oath to avenge my father, yours to justice and your country. Our love is impossible and it is best that I go. You will never see me again, but I want you to always remember that I loved you more than life itself. And because I do, I cannot remain to tempt you to renunciation of your duty. Please forgive me. —Ann.

Carver stared down at the paper.

"God in Heaven, she thought I meant to betray her!"

CHAPTER II

A Midnight Visitor

THE terms of the agreement were clear enough.

"—attempt to procure and deliver to United Spacelines, Incorporated, the secret and specifications of the mystery ship—"

Carver stopped reading.

"Change this to read: '—and deliver to the Government of Federated Earth Nations—' " he directed.

The official hesitated, looked long at him, then smiled and nodded.

"Of course, Mr. Carver. You realize, surely, that we are not attempting to gain this secret for our own personal use, but merely for the good of Earth people in this dire emergency. I'll have it changed at once."

He took the papers, noted the desired change in ink, and called the secretary.

"Have this corrected immediately."

The secretary nodded and made a hasty exit.

Carver got up and strode to the window of the office and stared down from the enormous height of the Spacelines

Building. One hundred stories below him lay the streets of Lower Manhattan, seething with life and blazing with millions of brilliant lights which made the night's blanket of darkness seem futile, except in the heavens above, which were inky by comparison.

The official joined him and spoke with precisely selected words.

"We have prepared a ship, the *Falcon,* our newest and most scientifically designed, for your needs, and it is ready right now at the Trenton Spaceport. We would desire that you leave at once. This ship is capable of a speed almost twice that of our regular cruisers. Also she is fueled and provisioned for a five-year voyage, so that in case of an accident—"

"There will be no accident," interrupted Carver. "If I don't return, I won't be alive either. As for leaving, I'll embark exactly at midnight."

"That will be quite satisfactory. With such speed at your disposal, it would be possible to reach the very edge of the solar system in, say, two months."

Carver glanced sharply at the man, but kept silent. This was clever probing, he knew, to determine the distance to his goal, which would make it possible to approximately guess the location—and in the case of Pluto, there would be little difficulty in guessing correctly.

The secretary returned now and handed the typed agreement to the official.

Carver returned to the desk and seated himself, carefully scanning the paper as it was placed before him. The correction had been made, and the balance was simply a retainer, with the stipulation that recompense would come in the form of a granted request, to be made upon return, and not stipulated as to exact nature.

Finally nodding his head in satisfaction he picked up the pen and scribbled his name at the bottom, whereupon the official affixed his own signature with a flourish. Carver retained a duplicate and handed the original to the other.

"There," he said shortly. "At best, it is a gamble for both of us. I will do my best in the line of duty."

"Which is all anyone can expect," said the official smugly, smiling peculiarly as he took up the paper and blew on it to dry the ink.

Carver jammed on his hat and strode from the room without further comment.

Outside he directed his steps back toward his office. The building was mostly in darkness as he neared its entrance. Just beyond, standing in the shadows, he observed a slouching masculine form. He stared intently at the fellow a moment, but could discern nothing of his features.

Then shrugging his shoulders, he entered, took the elevator to his floor. The hallway was dimly lit, and his footsteps echoed hollowly as he strode toward the door of his office, fumbling in his pocket for his keys.

ABRUPTLY he halted and stared down at the chrome-steel lock. The frame of the doorway gaped, the lock almost completely burned away as if by some acid. Carver stooped to inspect it in amazement. The jagged edges of it were encrusted with grayish ash, and even as he watched, a fragment of chrome-steel tinkled to the floor to shatter into a whitish powder.

"Disrupters!" Carver gasped. "That was done by disrupters!" He stood transfixed for a moment, the significance of it all bursting into his brain like a bombshell. Nowhere in the solar system, except on Pluto, existed anything like these strange metals.

"Ann!" he exclaimed.

Abruptly he laid a hand on the knob and flung open the door.

"Ann—"

"Come in," said a cold feminine voice, "and close the door behind you. I've got you covered, and at the first move—"

Jaw agape, he stared at the pale, flaxen-haired girl standing before him, a weapon held in slim white fingers trained directly upon his chest.

"Mary Buree!" he uttered dumbfoundedly.

"Come in!" snapped the Martian girl. "And close that door!"

There was anxiety in the tones of the girl pirate from the Arnold Mitchell band, and it was with relief that she saw Carver comply.

"But Ann has gone!" he exclaimed. "She's gone back to Pluto."

"I know," said Mary shortly.

"But—what about you?"

"She doesn't know we are here," Mary explained, the peculiar hardness still in her voice.

"We?"

She waved the weapon in the direction of the inner office.

"Go in there and sit down. I'll explain everything."

Carver went through the door leading to the other office and sat down. Mary closed that door also, then stood for a moment, contemplating him.

His eyes dropped to an oblong copper box, small, not more than three inches by two, and an inch in height. It was firmly clasped, and its seams fused, so that it was absolutely tight.

"What's this?" he asked sharply, picking it up and examining it. Faintly, it seemed, he could hear a rustling noise from within.

She stared at him. "That box," she uttered seriously, "contains something of extreme menace to Earth. It contains perhaps a half-dozen carbon disrupters."

"Carbon dis—" Carver leaped to his feet, his features gone white with consternation. "Great heavens, girl, do you know what you are saying?"

She nodded. "Yes. If they were to be loosed—"

"Loosed!" he gasped. "It'd be havoc! Everywhere on Earth is carbon—in the earth—in plants—in humans! Why if those disrupters were to be liberated in this room, New York would be destroyed within twenty-four hours, and after that—"

He halted as the full significance became apparent to both of them.

"Yes," she shuddered. "It would be awful. I tried to make Franco see it. I love him too much to allow him to do such a thing. And that's why I came here."

Carver looked at her, his brain whirling. The weapon was no longer trained on him, but hung in limp fingers. The girl's face was pale and imploring.

"What do you mean?" Carver asked hoarsely.

"It's the war," she began. "I'll explain it all. Franco has been contacting the Venus people. It is because of this that war has been declared. He has promised to help them conquer Earth—"

"You mean he's turned traitor!"

Mary stood erect, stung to the quick by his blurted out exclamation.

"No!" she blazed at him. "Franco is no traitor—he just believes that Ann is wrong—and she is! He thinks the only way to smash Spacelines is through this war. And he is right. It will be quicker, more effective, and more complete. Then there will be no need to start a competing line—if that were ever possible!"

CARVER'S eyes narrowed. "And so, he betrayed Ann, in her absence,

and took control of the pirate band."

"He has taken over the control that has grown lax in her hands!" flashed Mary. "For the past two years, she has made little progress toward our final plans. It is *she* who has betrayed the cause!"

Down in his heart Carver felt a little thrill at this revelation. Deep within her, though she wouldn't admit it, Ann knew she was wrong.

"But what have the disrupters to do with it?" he asked. "Why did you bring them to Earth?"

"I didn't bring them. The Venus people persuaded Franco that it would end the war quickly, and—"

"So *he* brought them!"

Mary shook her head. "No, he sent them with my brother, George. I came along. I tried to make Franco see that it was wrong, that it would be a mistake. But he is ambitious, eager, his judgment is clouded—so I stole the box. And when I had, I didn't know what to do with it. Nowhere on Earth is it safe. Somehow the disrupters will eventually be loosed, even though I buried the box, or threw it in the sea, or anywhere I can think of.

"I found out where you were, and came here. I used a chrome-disrupter on the door; then I waited, but you didn't come, and I decided to spend the night here."

Carver was dazed by her story. "What do you think I can do about it?"

She shrugged, and smiled a bit maliciously. "You have the box now. It is your Earth. The rest is up to you. My problem is to *keep* the man I love!"

Carver gripped her shoulders and shook her. "How do you mean that?"

A jealous look shot into her eyes. "Franco's been fascinated by Ann. She's a witch! When she returns—"

Mary halted suddenly, wrenched herself away from his grasp and again leveled her weapon.

"Don't try to stop me!" she cried, her voice catlike now, filled with jealousy and fear. "Back! I've done my part, now you do yours. If you do not, I swear Ann will never live to take Franco from me! I will kill her first!"

Carver stood dazed as the full significance of her words broke over him. Ann, going back to Pluto—and Franco Magra, having turned the band against her, waiting for her!

"God!" he muttered. "Now I've *got* to go. She would die first, rather than be possessed by him!"

Mary stood hesitantly, eying him, her weapon wavering in doubt.

"You mean you *were* going?"

Abruptly an idea sprang into Carver's mind. He couldn't tell her, of course, what his real errand was. But—

"Yes," he replied shrewdly. "I've been commissioned by Spacelines to capture her, and bring her back."

MARY'S eyes expressed instant disbelief. "You're lying! I know you love her! You wouldn't bring her back to—"

"But that's why I want to find her. I know the American courts will pardon her. It's the only way."

Intently the Martian girl peered into his eyes and he held them level with hers.

"American courts—" she began, then halted and a peculiar smile spread over her features. "Yes, I think you're right. But you don't know where to find her—"

"You tell me," said Carver, calculatingly, boldly.

Mary looked long at him. "I'll take a chance," she decided suddenly. "The caverns in the Ice Mountains, south of the great crater."

Her voice went hard. "But—remember, if you don't succeed, I'll do *any-*

thing to keep Franco. He's mine, do you hear? Mine!"

"My ship, the *Falcon*, is ready at the Trenton Spaceport now," Carver informed her. "I leave at midnight. And when I get to Pluto, you won't betray me to Franco?"

"I won't tell," she promised and shrugged. "Why should I? If you succeed, it will make my task easy. And now, I'm going."

JOHN CARVER stared after the girl thoughtfully as she disappeared through the door.

"I don't believe you *will*," he muttered when she had gone. "And you think I don't consider the *English* courts! Mary, you are still only a child! And who am I to judge a child in love? But jealousy is a terrible thing!"

He shrugged worriedly and turned to his desk. Thoughtfully he held the little copper box in his hand and his eyes stared unseeingly.

Pluto—that was the only safe place in all the solar system for this potent little casket of death. Even though he failed in his mission to secure the secret of the Mitchell ship, this box *must* go back there. Carver had three reasons now to go to Pluto: the war and his duty,—this box of deadly disrupters—and most urgent of all, Ann was in dire danger. When Franco Magra got her in his power—

Almost John Carver crushed the tiny box in his hand as his fingers clenched grimly.

CHAPTER III

Outward Bound

"A STREAK of light," said James Daley, master mechanic of Trenton Spaceport, glancing appreciatively through the office window at the sleek, gleaming ship reposing in the ways out on the field. "You've got the best ship in the solar system out there."

Carver smiled. "She's a darling, all right," he admitted, "but you're wrong about being the best. There's one better than she."

"You mean—"

"The mystery ship."

Daley nodded. "Yeah, I guess you're right there. I've never seen her myself, but I've talked to many who have, and they say she's appropriately named. Too bad such a brilliant discovery had to be made by an outlaw."

Carver glanced at his watch, then at the white-uniformed men swarming about on the field outside.

"Pretty near time for the take-off," he observed. "Eight minutes more."

He rose to his feet and extended a hand.

"Thanks for the service you've given me on this ship," he said. "With Jim Daley bossing the job, it's a cinch there'll be nothing going wrong because of bum mechanics."

"'Please omit flowers,'" laughed Daley. "That's only my job, and if I didn't do it, I wouldn't be here long. But I don't envy you your job, whatever it is. No telling what you'll have to run through now, with the spacelanes full of battleships.

"But you're chances are good. No ship can catch you on a stern chase, I'll bank on that, and you can run circles around anything except that pirate ship, and the chances are slim of meeting her."

Carver strode to the door. "I hope not," he uttered enigmatically.

"Say!" exclaimed Daley. "You aren't—" He stopped and grinned. "None of my business, eh? But anyway, I wish you success. The *Falcon* won't fail you in an emergency, and I suspect this is a real one."

They were walking across the field now, and the white-uniformed mechanics stood about, their work completed, curiously watching the sleek ship waiting to bellow out into space.

Carver halted at the swelling side of the ship for a final handshake, then entered. Sealing the door, he went to the control room, swiftly noting every detail of mechanical perfection and readiness for operation. He glanced again at his watch, noted that there were fifty-two seconds to go, placed his hand on the starting lever and glanced from the port for a last glimpse of the ground at close range.

It might be the last time he'd ever view it from this angle. . . .

Outside he saw Daley and his men had backed away to a safe distance and were standing with eyes intent on the ship. Behind them, from a hangar, Carver noted a half-nude figure running with a staggering trot.

At the same instant, Daley whirled to face the fellow, astonishment evident on his features even from Carver's position. The man gestured wildly at the ship, talking rapidly, though Carver could hear no sound of his voice within the vacuum-insulated ship. Carver saw Daley's jaw drop, saw him take a few undecided steps toward the ship, then begin recklessly to run.

Carver removed his hand from the starting lever. Very evidently something was seriously wrong, to cause the master mechanic to brave the rocket blasts in order to halt him.

"Can't afford to ignore Daley and go," Carver muttered to himself.

"*As you were!*" grated a masculine voice behind him. "And get going. Pull that lever down!"

Carver spun himself from the cushioned seat in astonishment.

Standing tensely in the center of the room, his fingers clutching an automatic trained steadily at Carver's heart, was a white-uniformed figure, hair disheveled, eyes glaring.

"George Buree—Mary's brother!" Carver exclaimed in dismay.

"Pull that lever!" repeated Buree hoarsely. "*Pull it*—or I'll put a bullet through your heart!"

CARVER hesitated a moment, debating the advisability of launching himself at the man's legs; then glancing from the window at Daley's running form, he swung back to his seat. If he failed to get Buree, the pirate himself would take the ship off and burn Daley to a crisp. Even now, Carver realized he'd have to get the *Falcon* off quickly. Hastily he pulled the lever down.

The *Falcon* slid slowly along on her skids, rockets roaring, nose pointed upward at a slight angle, gathering speed with a rapidity that caused Buree to grasp desperately for the wall, then find himself pinned helplessly against its hardness. Carver's broad shoulders pressed back into the cushions as he sat, eyes intent on his dials. In the technicalities of the take-off, he could spare no glance to discover what had happened to Buree.

Beyond the atmosphere, he cut the speed to a steady increase, realizing the pressure made movement difficult. Then, slowly, he rose to his feet.

"Now," Carver said, fixing a wary eye on Buree, "what do you want aboard this ship?"

Buree grunted. "You know what I want! I'm after those atomic disrupters."

"I'm afraid you've made a mistake."

"Oh, no, I haven't! You've got that little copper box right there in your jacket pocket. Come on, hand it over!"

Buree straightened up and advanced a few steps threateningly.

"How did you know I had it—how

Leaping forward Carver lashed out with a fist. Burce's gun roared

did you know to come here?" questioned Carver.

Buree grinned. "Sis told me."

Carver frowned. "Told you?"

"Yeah. She didn't want to, but I grabbed her as she came out of your office."

"So *you* were the man standing outside the building!"

"Right the first time. But I was only standing there because Mary'd gone inside, and I didn't know where. That's a big building, you know. So when she came out, I made her tell me what she did with the box."

"Then you know where I'm going?"

"I know where you *think* you're headed," retorted Buree. "But you're going to take me back to Earth first."

"First?"

"Sure. I haven't got anything against you and Ann. And maybe it'll save me a lot of trouble," returned Buree meaningly. "I'm going to see that Mary gets a break too. But quit the chatter. I want that box!"

He advanced until his weapon jabbed into Carver's short ribs.

"Come on, give it to me!"

Carver shrugged, his eyes, veiled by narrowed lashes, fixed analytically on the pirate. Then he fished the box from his pocket, juggled it and nearly dropped it.

"Look out!" exclaimed Buree, reaching for it. "Those things are dangerous—"

Carver moved like lightning, taking a quick step aside. His arm swept Buree's hand holding the gun aside with one smash, while his other hand tossed the copper box lightly to a cushioned seat. Then his fist swung upward from the waist—

Crack! A bullet from Buree's gun slammed into the chrome-steel wall, flattened, and dropped to the floor.

Startled and confused by the attack, Buree attempted to swing his weapon back into line. Carver blocked him once more. At the same time his fist slammed against Buree's jaw, snapping his head back.

Another shot thundered in the close confines of the ship, and Carver grappled for the weapon. Twisting the wrist that held it, he exerted pressure until the fingers slowly released their grip, dropping the gun to the floor. Carver kicked it spinning across the floor.

IN retaliation, Buree's knee came up into his groin, doubling him over in agony. Carver released his hold and staggered back. Buree followed swiftly, lashing out with both fists. One caught Carver on the temple and rocked him to his toes. Dazed, he retreated, covering up. Buree followed his advantage, lashing out blow after blow, which in the main bounced harmlessly off Carver's brawny forearms and shoulders.

Abruptly Carver lowered his head and charged. Both men went to the floor, rolling and writhing in furious combat. With a strenuous struggle, Carver got astride his opponent and pinned his shoulders to the floor, but Buree drove a fist straight up with horrible force into Carver's midriff. Carver collapsed with a gasp, rolling away to avoid a stranglehold.

Fighting for air, he staggered to his feet in time to meet the onrush of the enraged pirate. Stiff body blows crashed through Carver's guard against his chest, and for a moment he gave way. A policy of covered retreat sufficed to give him back his breath, and he braced himself. They exchanged blows, then Carver feinted with his left, opening Buree's guard.

Smack!

His right fist caught Buree squarely under the jaw and the Martian collapsed

in a heap. He rolled and moaned, tried to get up, then fell back.

"There," gasped Carver, panting. "I guess that'll hold you for awhile! And now, I'll put these disrupters in a safe place."

He retrieved the copper box, crossed the room and opened a locked metal cubby in the wall. Placing the box inside, he closed the cubby, the catch snapping loudly in the silence.

Behind him came a rush of footsteps. Startled and chagrined to realize Buree had been shamming his helplessness, Carver whirled about. For one flashing instant he saw the pirate's triumphant face as Buree charged toward him. Then the butt of a gun crashed against his forehead and darkness rushed in upon him as he tumbled to the floor.

INTERMINABLE eons of fathomless time seemed to have elapsed when John Carver struggled slowly and painfully up from the abyss of darkness.

His subsconcious brain seemed urging him to an effort of waking, against which his whole body revolted, because it meant returning to an all encompassing, throbbing pain that beat against his temples like the pound of a great drop forge. His skull seemed bursting with agony, and he became more aware of details, only to wince at the least facial movement.

He forced his eyelids upward, gritting his teeth in protest against the torture of the attempt. With light, his brain closed of the fogging pain, and although he still suffered, he found that he could think clearly. The reason for his pain flooded back into his memory.

"Buree!" he groaned. "The disrupters!"

He rose staggeringly and stared around. His gaze fell upon the wall, and he exclaimed aloud. The cubby door hung awry on its hinges. Carver needed no second glance to realize the disrupters were gone.

His gaze shot to the porthole and the blackness of space beyond it. Two hasty strides brought him across the tiny room and he stared out.

Like a vast green-and-white bubble he saw Earth floating beside the ship, apparently only a few hundred yards away, deceptively small with the illusion of space.

A rapid search of the ship revealed that George Buree was no longer aboard the *Falcon*.

"But how—" Carver paused, struck by the only possible answer to his question, and made his way toward the bow, to the recess wherein snuggled the tiny life-rocket. The compartment was mockingly empty.

"Gone!" Carver gasped. "Back to Earth, with the disrupters!"

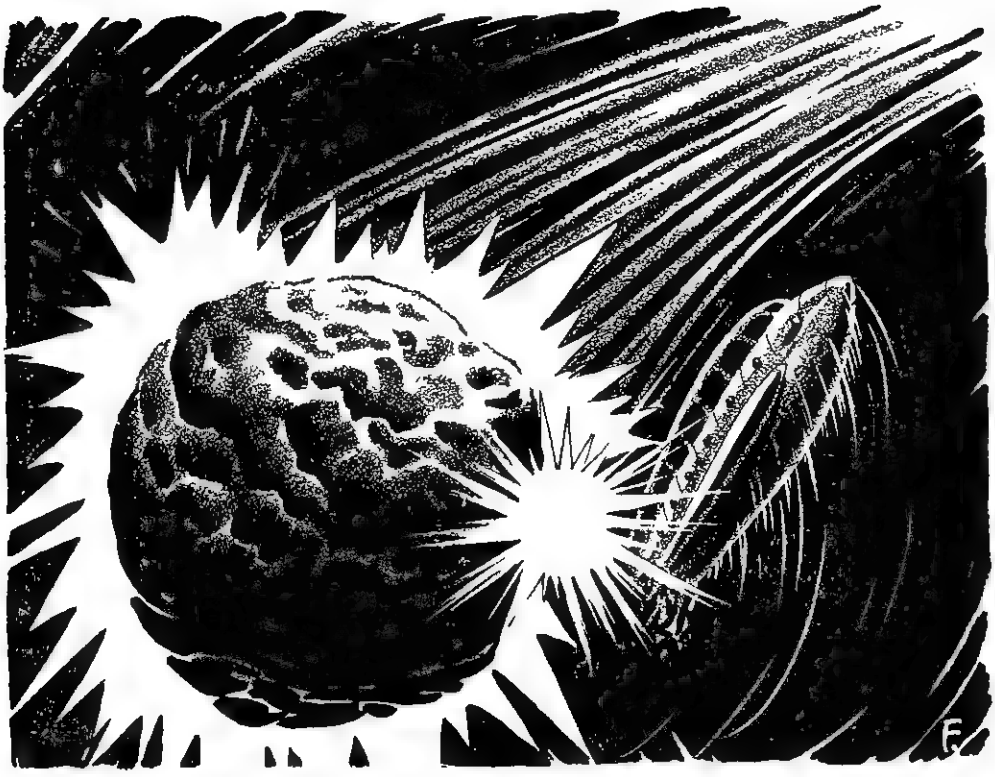
He returned to the control room and stared through the port. Plainly visible on the surface of the green sphere so deceptively close, though he knew it was several million miles away, were the configurations of Asia, Europe and Africa.

"No use going back there," he said aloud. "It'd be impossible to find him. And a warning is worthless. Once the disrupters are released, havoc is inevitable."

He shuddered as he pictured the weirdly intense flames creeping, spreading, growing vastly as they infected the carbon content of the Earth, of every plant, of every living being. Horrible flaming death, much worse than any plague—it would s w e e p irresistibly across the entire face of the planet.

"No," Carver d e c i d e d dully. "There's no use in going back."

His mind swept to Ann Mitchell and the dire peril awaiting her on the dark planet. A mental reproduction of Franco Magra's piercing black eyes, the



There was a terrific crash and ugly rock edges tore at the Falcon

rapacious cast of his aquiline features, flashed across his memory. Therein lay the more immediate danger—danger that chilled him to the core. Ann in those ruthless, lusting hands!

With sudden determination on his grim features, Carver turned to the control board and scanned the meters. Several computations and a consultation with a chart revealed that the *Falcon* was still on a course not greatly deviating from the correct one.

Sliding into the seat Carver began compensating with directional rocket-bursts; then, the course corrected, he applied full power until the whole ship reeled and shuddered under the impetus of its flaming rocket tubes. Terrific acceleration pressed him back into his seat, but he withstood it grimly.

The needle on the speed indicator swept slowly around in a steady increase, building up to a tremendous speed before Carver finally shut the rockets off.

CHAPTER IV

The Black World Again

PLUTO rolled like a great gray ball in the blackness of space, only dimly lit by the tiny disc of the sun, far back in the void. But for all its dimness, each surface detail stood out with startling clarity, unblurred by the presence of an atmosphere.

Ages agone, the planet must have had an atmosphere, but something had happened to it. And its vanishment seemed destined forever to remain one of the unsolvable mysteries of space.

But now, staring down upon its surface, John Carver gave no thought to

mysteries. He sought the range of peaks known as the Ice Mountains. Somewhere at their foot, fronting the great Dust Desert, were the caves he was seeking.

He gave a grunt of satisfaction as he finally picked out the dim, jagged white line that indicated the mountain range. From space, they gave the illusion of being formed of ice, but they were not. They were great masses of tortured granite, marble-white granite, torn somehow in some unnameable catastrophe from the bowels of the planet.

Carver turned to his levers. As he did so, his eye caught a fleeting glimpse of a hurtling mass, rushing down upon him from the blackness of space with express-train speed. It was a great, jagged fragment of rock, hurtling straight for the *Falcon*. Instinctively he jammed the rocket lever down to its full limit and crashed back into his seat, pinned there by the sudden tremendous acceleration.

For three long seconds that seemed centuries, his body pressed rigidly against the seat. His eyes remained glued on the approaching menace. It seemed slowly veering, the result of his flight from its path, and almost it seemed that it would miss him. Then, revolving as it came, a jutting prominence of shattered rock protruded, and with a terrific crash the ugly serrations tore at the tail of the *Falcon*. Half the rockets ceased firing. The *Falcon* veered dizzily, whirling like a top.

Carver's hand pushed back the lever, stopping the rockets' blasts. But the heavens still revolved dizzily, presenting first the star-ridden reaches of outer space, then the vast gray ball of the nearby planet, and finally the receding bulk of the tiny Plutonian satellite.

Senses whirling, Carver studied the spin of the ship; then carefully he fired several bow rockets. Slowly the rotation stopped. Once more the planet loomed before him, much closer now. He discovered the ship was dropping at terrific speed.

Instinctively he reached forth a hand to slow his momentum with a burst from the forward rockets, then desisted. No use wasting fuel necessary for landing. With half his stern rockets gone, he'd never be able to produce much more than a crazy whirl. As it was, he was headed almost straight for his destination, into the heart of the Dust Desert.

Carver relaxed, allowing the ship to plunge down, a grin growing on his tense face. His jaw relaxed, and he discovered his teeth hurt, so hard had he been clenching them.

"Whew!" he breathed. "I never hope to come any closer than that!"

Fifteen minutes later he moved into action, began braking the ship with the forward rockets. Flame belched out to the fore at timed intervals. Between blasts, he could see the now near surface rushing up at him with lessening speed.

The planet was still convex below him, but several rocket bursts later, it suddenly seemed to collapse and became saucerlike, concave. Carver shoved the lever down hard, and the surface vanished in flame. The ship shuddered warningly—a crash came from something giving way in the stern.

Locking the braking rockets, Carver swung himself laboriously into his space suit, then returned to his position. The rockets ceased flaring as he released the lever, revealing the surface alarmingly near.

QUICKLY he leveled the ship off, pointing it toward the distant mountains, until it hurtled along almost parallel with the surface. Once more he fired the bow rockets, his speed dropping rapidly. Then abruptly they went

dead. Out of fuel.

Carver clutched the seat hard, and clung.

Then the ship hit. Like a spent shell it plowed into dust—thin, powdery, almost impalpable dust, never disturbed except by the impact of meteorites, completely hiding vision. For several miles the ship slid along, exactly like a giant bob-sled, braking for a halt at the end of its run. Then shudderingly it came to rest with a sickening crash. The bow struck something solid, caved in like an eggshell. Carver lost his hold and plunged into the instrument board.

For a moment he was dazed; then he recovered, to stagger to his feet. Outside the dust was settling swiftly, in free fall unsupported by atmosphere. It dropped like a giant curtain with startling rapidity. Then, amazingly, the scene became once more one of extreme clarity and distinctness.

Carver grinned. "Made it!" he exulted. "A sweet landing—thanks to this dust. And I'm only a few miles from the mountains. Couldn't have done much better if I'd actually picked the spot."

He turned to the port. Opening it, he clung while the air rushed out of the ship; then he stood and stared into the desert for a moment. He turned back.

"I'll need air," he said aloud.

Hung beside the rack that had supported his space suit were five cylinders. Search for more revealed that the storage compartment had been torn from the ship, along with the rockets, in the collision. Only the automatic lock had prevented the air from rushing from the forepart of the ship out there in space. Carver shrugged. The five cylinders would have to do.

He threw them out the port, then climbed down to the surface of the desert. A moment he stared at the wrecked ship, then shrugged once more.

He glanced down at the cylinders. Forty hours of life, plus the seven remaining in the container on his back! In forty-seven hours he would have to find the caves, or—

Facing the gray-white hills to the north, Carver shrugged, then struck out with steady, slogging steps.

For about four miles he continued on, beginning to sweat inside his suit at the steady effort and the weight of the cylinders he carried. He halted there to scrutinize his surroundings, grunted exultantly as he recognized the plain before the cavern entrance. It was deserted. No ship was visible on its flat expanse. He clamped his jaw firmly and went on.

Reaching the black opening of the cave he halted, removed his flash from his belt and sent its beam into the darkness. It revealed blank, rocky walls—gaping doorless tunnel entrances. Nothing else.

The cavern was empty, deserted!

THE discovery was a shock. Mary Buree had lied to him!

What chance had he, single-handed and confined to a radius of not more than fifty miles, to find Ann Mitchell now? And without a single clue of what direction to take, even if she were nearby. Clearly he was at the end of the trail.

All thought of the danger to Earth—the release of the disrupters—the invading hordes of Venus—of his own impending death, fled from Carver's mind. His one great concern, searing its torture into his brain, was Ann Mitchell and the danger that awaited her at the hands of Franco Magra. Ann—his Ann—the plaything of the unscrupulous Martian!

Carver groaned. Perhaps even now she was helplessly in the Martian's

clutches.

Carver's very soul revolted against the girl's fate, and unconsciously he braced his shoulders, forcing his feet to carry him forward into the blackness of the tunnel. To his last breath he would press his search. Perhaps in the cavern he might find some clue.

ANOTHER thought spurred him on to quicker steps. The *Falcon* had been fast; certainly faster than the Earth ship Ann was undoubtedly using. Therefore it might be several days before she arrived on Pluto. And considering the fact that he'd used top speed all the way, it was almost a certainty she hadn't arrived yet.

Hope sprang up again, although his reason told him it was an even more unfounded hope than that which had spurred him on toward the cavern. Facing him there had been doubt, and here nothing but certain death—a death that might become a horrible one of thirst.

But in a space suit, with its air-tight check on rapid evaporation of the body fluids, Carver felt certain he could stand a lack of water for the remaining forty-four hours of his air supply. Already three hours were gone in covering the four miles to this spot.

He flashed his light about every corner of the cavern as he advanced. Before him, on the dusty floor, he saw faint, almost obliterated tracks. They were unidentifiable, except that they seemed to lead inward, judging from the direction the loose dust had been kicked by whomever or whatever had passed this way.

Inward!

Galvanized into action, Carver plunged down the corridor leading into the black depths of the cave. As rapidly as possible he followed the telltale marks along the tunnel, which led slightly down-grade. The marks continued on without interruption, and he found no difficulty in keeping to the trail for some minutes. But suddenly they vanished!

Gazing around, Carver realized all at once that the rocky walls were no longer visible. He had emerged into a gigantic cavern, whose walls were beyond range of his flash.

Suddenly he began to gasp, and his nostrils clung together on every inward surge of his breath. He halted, fumbling with his free hand for one of the burdensome oxygen tanks at his belt. His tank was becoming exhausted of its oxygen content, and it would be necessary to replace it, a comparatively simple operation. He realized with amazement that he must have progressed through the tunnel for a matter of some four hours.

Awkwardly he shut the valve that led to his helmet, took off the empty tank and dropped it into the dust, forced meanwhile to hold his breath until the new tank was snapped into place.

Breathing naturally once more, Carver took stock of the huge cavern. It stretched on into darkness, its walls white granite that caught the light of his flash, making the whole interior glow. Abruptly he snapped it off and stood still, his heart beating madly. There, in the rocky wall, was an unmistakable metal airlock. That meant there was air beyond.

"I've found it!" he breathed.

In the darkness, Carver became aware of two dim sources of radiation. Above, the twinkle of several stars, evidently from a great hole in the cavern roof—and off to one side, behind a series of sand dunes, a wavering artificial light, which slowly advanced.

It came now over the crest and Carver saw that it was a man, carrying a flash, and dressed in a space suit, as he was.

Carver fingered the weapon at his belt and his jaw set grimly. That was undoubtedly one of the pirates. Slowly the man walked forward, apparently headed for the airlock. Carver slumped down behind a sand pile. The man must pass very close to his position.

When he had approached within ten yards, Carver leaped out, leveled his weapon and shouted.

"Don't make a move!" he yelled. "Or I'll burn you!"

There seemed utter surprise in the other's bearing, and Carver advanced slowly, wondering at the man's apparent lack of resistance.

"John!" came a muffled, incredulous exclamation.

Carver halted, stunned, p e e r i n g through the gloom.

"Professor Caldwell!" he gasped.

Jamming his weapon into his belt, he advanced as quickly as possible, his arm outstretched. In a moment the two men grasped each other's metal-clad fingers, staring into each other's amazed eyes.

"John!" exclaimed Caldwell again. "How in Heaven's name did you get here?"

CARVER jerked an explanatory arm upward.

"I was wrecked in the Dust Desert," he said. "When I reached the cavern, I found it empty, but luckily I stumbled on the trail and followed it."

"I don't know how you did it!" gasped the scientist. "I had thought no one could possibly have discovered this place."

Carver grinned. "I *had* to discover it, or die! I was marooned with only five oxygen cylinders and no water. In fact, I'm almost dead on my feet—" He halted abruptly, clutching Caldwell's arm. "Franco Magra!" he burst out. "Where is he?"

"Inside," said C a l d w e l l. "But why—"

"Venus has declared war on Earth, and he is helping them."

"Magra helping Venus—but how?"

"Disrupters! This very minute, George Buree is on Earth, with a box of carbon disrupters, waiting orders to release them—if they haven't been loosed already."

"Great God!"

"And to cap it all, Magra has proved a traitor to Ann Mitchell, and plans to overthrow her and take her for his plaything."

"What are you saying?" Caldwell gripped Carver's arm. "John! She's here! Just arrived some hours ago."

Carver stared. "We've got to rescue her, before it's too late," he said desperately, "and then we've got to capture the mystery ship, get the secret from Ann, and take both the ship and Ann back to Earth."

"Both?" Caldwell's gaze penetrated deep into Carver's eyes.

"Yes. I've *got* to do it!"

"I see," replied Caldwell slowly. "John, do you think—"

"Never mind that," said Carver hoarsely. "Too much hangs in the balance to stand here arguing. Will you help me?"

"Certainly," replied Caldwell simply. "I have an oath to protect the Earth from enemies, of course, and I can do nothing else, even if it means—"

"Then come on. We've got to find Franco Magra and Ann."

Leading the way, Caldwell passed them through the airlock, and once inside, removed his helmet.

"Take off your suit," he directed. "We'll have to move carefully from now on. And have your weapons ready. We shall certainly meet with opposition. However, the element of surprise will be on our side."

Carver complied, surprised at the pleasing warmth of the air about him.

Caldwell led the way down the corridor to a door in the rocky wall.

"Beyond that you will find Magra," he whispered, halting. "If we can capture him, the rest should be easy."

Carver gripped his arm. "You stay back," he ordered. "It might be a good thing to keep them unaware that you know of my presence. If I succeed, I can do it single-handedly just as easily; and if I fail, you may be able to turn the tables."

Caldwell nodded and fell back. "I'll keep watch," he agreed. "And you can count on me. They've given me the freedom of the place ever since I've been here. I've seen many marvelous things; and in return, I've done several things in research that have aided them. If you fail, I will do what I can."

Carver gripped the old man's fingers once more, and as Caldwell slipped back into the gloom, he stepped to the closed door, weapon in hand. From behind it came the sound of voices. Carver recognized one of them instantly. It was Franco Magra, the saturnine Martian engineer.

Carver flung the door open.

"Don't make a move, Magra," he warned quietly, stepping inside, "or I'll shoot to kill!"

MAGRA and the other pirate whirled at the sound of Carver's voice to goggle at him incredulously.

"You!" the engineer exclaimed.

"Drop your belts on the floor," directed Carver with a wave of his automatic, ignoring their amazement.

Glaring at him, Magra complied slowly, but he did not offer to make an overt move. Carver watched him intently.

"Now back up," he ordered.

The pair took several slow steps backward, Carver advancing until he could pick up their belts. He carried them in one hand, and covered his captives with the gun in his other.

"What do you want?" asked Magra hoarsely.

"I want the mystery ship, and Ann," said Carver grimly, "and I'm going to take both. Come on, lead me to her!"

"He won't need too," came a clear feminine voice behind him. "Drop that gun!"

"Ann!"

Carver retained his weapon, stepping sideward until he could see the girl and yet keep control over his two captives.

Ann Mitchell stood in the doorway, an automatic held in her ready hand.

"Drop that gun," she repeated quietly. Her face was pale, but determined.

"And if I don't?" he questioned tensely, pleadingly.

A hurt expression came into her eyes, but she covered it instantly.

"Don't force me, John," she said. "If you threaten the failure of all my plans, even my love for you can't prevent me from pulling this trigger. Oh, don't you see what you're trying to do!"

"Yes," he returned steadily. "I want to save the Earth, and I want to save you."

"Save me?" She shook her head sadly. "No, that is a dream. They hang murderers in England."

"No!" began Carver.

A hopeless, determined look spread over Ann's face and she leveled her weapon directly at his heart.

"Drop your gun, John, or I'll shoot."

She spoke in low, deadly sure tones, and Carver could not doubt that she meant it. Shrugging helplessly, he dropped the gun.

Instantly Magra leaped forward, lifting a wooden chair from the floor. Carver tried to duck, but he was too late. The chair crashed against his skull and he went down, Ann's startled

scream becoming a ringing echo in his unconsciousness as blackness surged overwhelmingly in upon him.

CHAPTER V

"Take Me Back—to Die!"

"JOHN!" The sibilant whisper penetrated Carver's dulled senses as he struggled up from the depths of unconsciousness. "John, where are you?"

Carver opened his eyes, staring into darkness no less dense than the oblivion from which he had just come. He struggled to sit up but found himself tightly bound.

"Who's there?" he called uncertainly.

"Not so loud," came the anxious whisper again, this time nearer, and Carver recognized the tones of old Professor Caldwell. "The guard will hear you."

"This way," Carver whispered back. "I'm tied to a post or something."

Abruptly he felt Caldwell's hands on his shoulder, then they fumbled down to his hands and squeezed reassuringly. Carver felt the cold steel of a knife on his flesh. A few seconds, then his tightly bound wrists came free. He shook the strands from him and sat erect in the darkness as Caldwell freed his legs.

"Where is this place?" whispered Carver.

"One of the storerooms. There's a rear door. Magra forgot about it, or else doesn't suspect that I know of your presence."

"Good!" returned Carver. "How long have I been in here?"

"Not more than two hours. I had to wait until the furore died down before I tried to free you. But come on. We haven't any time to waste. Ann knows now that Magra has turned traitor, and I fear for her safety."

Carver gripped the old scientist's arm.

"Lead the way," he whispered tensely. "I've a score to settle with that fellow, and this time—"

He followed the groping figure of the scientist through the gloom and finally discerned the gray dimness of an opening into a tunnel beyond. Once there, he loosed his grasp of the old man's shoulder and faced him.

"Where is Magra now?"

Caldwell pressed the knife into his hand.

"This is the only weapon I could get," he said. "But maybe we can sneak up on the guard around the corner at the other storeroom door. He has a heat gun—"

Carver took the knife and pressed Caldwell's arm.

"You stay here," he whispered hoarsely. "I'll get that gun!"

He advanced quietly down the tunnel till he came to the bend. He peered around the corner. Ten feet away the guard leaned against the wall beside a barred door. He seemed lost in thought, or just dozing.

Carver grinned thinly. He edged around the wall, keeping his body as much in the shadow as possible. Five feet he slid along. A fragment of stone grated beneath his foot. The guard whirled, reaching for his belt.

Still crouching, Carver hurled his body forward, the point of the knife held upward in his clenched fist. He brought his arm up, and with a sickening *thuck!* the knife drove home under the chin, sending the point up into the skull. Almost soundlessly the guard toppled over backward, tearing the knife from Carver's grasp.

Breath rasping, Carver bent over the corpse and took the heat gun from the clenched fingers. In a holster at the belt, he found an automatic. This he also stuffed into his own belt. Then,

soundlessly, he retraced his steps to Caldwell.

"Lead on," he rasped grimly. "I've got the gun."

Wordlessly, Caldwell led the way down the tunnel to a more lighted section, halting before a doorway.

"Ready?" he asked.

Carver jerked the automatic from his belt and pressed it into the older man's hands.

"Yeah," he grunted. "Go ahead and open it."

CALDWELL released the catch, flung the door open. The room beyond was deserted.

"Nobody in here," began Carver, then halted abruptly. From another doorway came an angry voice. It was Franco Magra's! Almost instantly there came a response in Ann Mitchell's cool tone.

"Keep back, Franco," she was saying. "Or I'll shoot! No matter if the rest of the band have turned against me too, I'll take my chances."

Carver shouldered his way through the doorway and faced the scene before him. Franco Magra stood crouched before Ann, facing her leveled weapon with an angry snarl on his face. The girl was standing her ground bravely, although her face was pale and troubled.

"Yes, Magra," grated Carver in low tones. "One move and I'll break every bone in your rotten body."

In startled surprise, Ann turned toward him, her eyes wide.

"John!" she gasped. "And—Professor Caldwell!"

For an instant her gun did not cover Magra, and in that moment he leaped forward. His hand batted the weapon from her fingers, and the other arm clutched her to him. He whirled her body between him and the doorway in which Carver stood.

Carver's hand streaked up with his weapon.

"Don't shoot," Magra warned. "You'll kill her first!"

For answer, Carver tossed his own weapon to Caldwell, then leaped forward. Magra pushed Ann full into his advancing form, himself plunging for the gun on the floor. Carver caught Ann's body, pushed her aside, then left his feet in a flying tackle that caught Magra at the knees.

Both men went down with a crash, Magra's fingers falling short of their intended goal. In the doorway behind, Caldwell stood in indecision, his own automatic held limply at his side. With a quick glance, Ann rose and ran forward, snatching her own gun from the floor. Then she backed against the wall, holding the weapon clutched in her fingers as she watched the battle before her.

Magra heaved mightily, Carver catapulting off the Martian's big body to crash against the opposite wall. He lunged forward again almost immediately, but not in time to prevent Magra from regaining his footing. Both men met with fists lashing out, and both landed thuddingly against the other's body. Carver winced as his breath went from his lungs with a gasp. The big Martian engineer was far the better in this sort of rough and tumble.

Carver danced warily back on his toes, sparring. Magra followed, becoming annoyed at his inability to penetrate the haze of stinging blows and trained guard that Carver employed. With an angry snort, he rushed forward suddenly with the full effect of his two hundred and sixty pounds. Carver saw him coming, drove his fist straight out from the shoulder.

Crack!

His arm went limp from the force of the blow, dropping to his side. His

whole fist numb, Carver watched Magra sag slowly to the rocky floor, jaw slack and eyes growing hazy.

Ann also stared down at the limp body, her gun held in untensed fingers for a moment, then coming up to cover Carver once more.

He paid no attention, but leaped instead with a warning shout to Caldwell's side.

In the outer room several pirates were charging forward, and out in the corridor came the rest. Carver snatched the heat gun from the astonished Caldwell's hand and with his one good arm leveled it on the attacking men.

"Stop!" he yelled. "Or I'll burn you all down!"

Frustrated, they reeled back, glaring at him, but dominated by the menace of the heat gun.

"Drop your guns!" he directed. "Quick!"

THEY complied, scowling. Over his shoulder Carver spoke in low tones to the girl.

"Now's your chance, Ann," he said quietly. "If you're going to shoot me, go ahead and get it over with. But I wish you'd see what I'm trying to do. Once back on Earth, we can get things fixed up—"

He backed until he could see both her face and that of Caldwell, in addition to the pirates he was holding at bay.

For an instant Ann stared at him, then her arm dropped to her side.

"No, John," she whispered. "I can't see it your way, but I can't shoot you, either."

Carver nodded and advanced once more.

"Down the corridor, all of you men," he snapped. "To the storeroom."

Sullenly they obeyed. At the prison room from which he himself had just escaped, Caldwell opened the door and the pirates filed in. Then Carver kicked the door shut and barred it.

"The front door with the dead guard is still barred," he said. "I guess they're safe enough in there for awhile."

They returned to the room where Ann still stood. Carver advanced to Magra's limp form, which was beginning to stir, and yanked the Martian to his feet. He slapped the man into a conscious state, then pushed him toward the door.

"Take him away," he directed Caldwell, "and lock him up separately. We're going to leave for Earth immediately, and we'll take him along to help us find Buree and those disrupters."

Caldwell nodded, a gleam in his old eyes, and prodding Magra with his automatic he disappeared down the corridor.

Carver turned then to Ann. Her eyes were misty and her arms hung limply at her sides. Slowly her right hand came up and she extended the gun, butt foremost, to him.

"What's that for?" he asked.

"I'm your prisoner," she said dully. "I'm surrendering, so you can take me back to be punished."

For an instant Carver stared at her, then gathered her in his arms. She did not offer to respond.

"Please, Ann," he begged. "Don't take it that way. Don't you see, I am acting for your own good? It's the only way. I've a plan—"

Suddenly she flung her arms about his neck and kissed him fervently, several times; then with a sob in her voice:

"Even if they hang me, I will do as you want," she said brokenly. "I love you. That is all that counts. My work here has failed. My band has gone against me—"

"Ann," he urged. "Don't take it that way. I swear they will not hang you. Please trust me. I am sure of what I am doing."

She kissed him again, sobbing, then tore herself away and ran in the direction Caldwell had gone.

With an ache in his heart, Carver followed.

AN hour later, after having donned space suits, the trio and their single prisoner, Franco Magra, emerged from the airlock into the great outer cavern. Caldwell led the way to the sleek mystery ship, destined to be a mystery no longer, and in a few moments they stood in the control room of the ship ready for the take-off. Magra was securely confined in a cabin.

Carver depressed the starting lever and the ship lifted slowly at first, then with gathering speed.

"What a ship!" he breathed, marveling at the steadiness of its control under the lightest pressure of his finger.

Shooting up with increasing momentum, they surged through the great hole in the cavern roof and out into space. Once free of the planet, Carver pointed the mystery ship toward the brilliant dot that marked the sun—toward its third child, Earth.

Behind him a glistening tear rolled down Ann Mitchell's cheek and splashed on the chrome floor. Old Professor Caldwell saw it and turned away, biting his lip.

CHAPTER VI

Duped!

"IT seems," said Secretary of War Corliss, "that you've been duped."

Carver's forehead grew dull red with anger.

"You mean that when I delivered those drawings and formulas to the patent office, I completed Spacelines' patent application for the mystery ship?"

"That seems to be the unfortunate fact," admitted Corliss. "And I don't see where you have any redress. You agreed to procure and deliver to the Government of Federated Earth Nations, the secret of the pirate ship, for use against the Venusians in the war. That agreement has nothing to do with the patent filed by Spacelines."

"Then that means Spacelines has full control of the new ship, its manufacture and its use?"

"Well, not exactly. Being in a state of war, they can't do otherwise than turn the ship and its manufacture over to the Government. But legally, they own it completely, and pending the outcome of the war, it will eventually become their sole property."

Carver rose to his feet, his face grim.

"So this is my reward for service in the line of duty!"

"You still have your reward to claim, according to your agreement," reminded Corliss. "I imagine you can make Spacelines pay heavily there. They've left themselves wide open."

"No monetary reward could possibly offset the value of the patent rights on the mystery ship!" snapped Carver. "But my request has nothing to do with money. In fact, it is yourself who will have to fulfill it—yourself and the Federated Government."

Corliss' brow wrinkled in a frown.

"What do you mean?"

"My request is complete pardon for Ann Mitchell!"

Corliss regarded him a moment, then shook his head.

"I'm afraid you're asking something that can't be granted," he stated heavily. "You have no such agreement with the Federated Government. I'm afraid the Supreme Court would rule that an agreement entered into by private parties can't be held as binding on the Government.

"According to the laws of the planet, Ann Mitchell is guilty of piracy on the spacelanes, and as such, must be brought to trial. However," he hastened to assure, "I am certain that she will get off with a very light suspended sentence, on that charge—"

"—only to be hanged by the English State courts for murder!" finished Carver bitterly.

Corliss nodded his head sadly. "I'm afraid so, Carver. We are up against an impassé there."

"Does it mean nothing to the English that she has given them the means to save themselves from slavery under Venusian masters?" said Carver angrily. "I—"

"Undoubtedly it does," interrupted Corliss. "I'm afraid such a decision is a matter of time, however, and it will do us no good to discuss it here. In fact—"

The telephone at Corliss' elbow interrupted further speech and he lifted the receiver to his ear. A moment he listened, a baffled expression crossing his features. Then, his brows knitting in a frown, he slowly replaced the instrument and turned to Carver with a peculiar glitter in his eyes.

"It seems," he said levelly, "that you've been duped from both sides. The Patent Office has refused the patent on the grounds that the invention is impracticable. It will not work. Even the ship you captured does not function. The ship is utterly valueless to us!"

"What!" gasped Carver incredulously.

"And not only that, but Ann Mitchell and Franco Magra have escaped with the assistance of persons unknown, using a strange type of metal melter, and are now at large, whereabouts unknown!"

Dazed, Carver stared at the Secretary of War for a long moment; then, the realization of what the official's words meant seeping into his brain, he went chalky white.

"Great God!" he groaned. *"She tricked me!"*

SLOWLY Carver turned and stumbled from the office to the street outside. Descending the steps, he stood undecided for a moment.

"John! John!" came a call from across the street.

Startled, he swung his gaze to the cab parked there. Professor Caldwell was gesticulating from a side window.

"Come," he called, "it's very important!"

Leaping forward, Carver evaded traffic and reached the cab. Opening the door, he flung himself into the seat. The cab roared from the curb immediately, and as he sank back, Carver found himself staring into the white face of Mary Buree.

"Mary!" he exclaimed. "What—"

"She has come to take us to Magra and Ann," interposed Caldwell quickly. "They plan to loose the carbon disrupters. George Buree rescued them both from prison—"

"I know," offered Carver. "Corliss just told me of it. He also said that the patent on the mystery ship had been denied as impracticable."

"Impracticable?" Caldwell's voice was curiously level and unmoved.

"Yes," returned Carver grimly. "Ann gave me a worthless formula."

Caldwell considered the younger man closely, speculatively.

"And her pardon—what did you learn about that?"

Carver glanced at the scientist with a frown.

"My request was refused, as being a private agreement and not binding on the Federated Government."

"Exactly," said Caldwell. "Feder-

ated law is such that justice isn't held up even out of gratitude. And that's why I advised Ann to give you a false formula."

Carver jerked about, startled. *"You!"*

"Yes. However, I have the correct formula, and I'll file a new patent immediately we rescue Ann. Then, we shall be in a position to dicker. I won't reveal the secret without assurance that full pardon will be given. In a way, all this wasn't necessary, but I suspected Spacelines would trick you, and I wanted to have their application refused. It'll be much easier for us now that Spacelines has no further claims."

Carver sank back in his seat, looking at the old scientist with a baffled stare. Then suddenly he jerked erect again and whirled on Mary.

"Where are they?" he questioned tensely.

"In a warehouse on Long Island," said Mary, white-faced and anxious. "I heard Franco Magra say that he and George were going to release the disrupters on the mainland, and I slipped away to find you. But Mr. Caldwell intercepted me, and told me he knew where you were."

"We'll have to rescue her ourselves, and get those disrupters," interrupted Caldwell. "An attack by police would only make matters worse."

"Yes," agreed Carver hoarsely, "that we've got to do, above all!"

In twenty minutes the cab drew to a halt in the warehouse district and Carver leaped out, followed by Caldwell and Mary. He paid the cab driver, who departed. The street was dim with approaching night, and as Mary led the way swiftly down between two warehouses, Carver gripped his gun savagely in his pocket. They stepped into a small boat, Mary taking the oars.

"Let me—" began Carver.

"No," said Mary hastily. "I know exactly where to go, and we mustn't lose time."

Carver seated himself tensely, his gaze bent ahead as the girl stroked with amazing power on the oars, sending the tiny boat slipping rapidly through the water. In a moment he picked out the building toward which they were headed. It was a massive thing, old, rotting, crumbling, unused.

Mary guided the boat under its massive piles and brought it to a drifting halt beside a rickety ladder.

"Up there," she whispered. "Don't make any noise. They're still here."

"How do you know?" whispered Caldwell.

"Their boat," indicated Mary, motioning to another craft tied to a pile.

CARVER clambered quickly up to the floor of the warehouse, paused to lift the other two up beside him. Then Mary led the way sure-footedly along the rough planks. They came to a door beneath which streamed a thin bar of light.

Mary halted. "In there," she said in a low voice, her face white and frightened in the gloom.

Drawing his weapon, Carver stepped to the door, then flung it open.

"Don't move!" he snapped in brittle tones.

Franco Magra and George Buree whirled around to confront the trio at the door, Magra in infuriated rage, Buree in wide-eyed astonishment. In Magra's hand was the copper box containing the disrupters. And helplessly bound in a chair beside the rough table, on which flickered a kerosene lamp, was Ann Mitchell, a glad light in her eyes.

"John," she cried, "you've come!"

Carver held the two pirates at bay.

"Untie Ann," he directed Caldwell, and the older man hastened to comply.

Then, when Ann was safely behind him, next to Mary, he spoke.

"Hand me that box, Magra."

Glowering, Franco Magra hesitated. Suddenly Buree, who had been regarding Mary with an accusing look in his eyes, leaped forward and snatched the box from Magra.

"*You,* a traitor!" he said brokenly to Mary. Whirling, he turned to the wall, his arm raised to fling the box shatteringly against the planks.

Mary screamed. "George, *don't!*"

Paralyzed, Carver and Caldwell stood unmoving. But not so Mary. Her slim form darted from behind them and ran toward Buree. She flung her arms about him in a desperate attempt to prevent his action.

The copper box escaped his clutching fingers, tumbled to the floor. Buree whirled, thrusting Mary roughly from him. She screamed and stepped back, the high heel of her shoe crunching down on the box. She fell heavily to the floor.

Almost instantly she screamed again, in pain, and Carver became aware of a crackling sound. In horror, he stared at a wisp of hissing black smoke bursting out in rapid growth, spreading with terrible quickness from the girl's small foot.

"Great God!" he choked out in soul-searing horror. *"The box has broken!"*

CHAPTER VII

Disaster!

MARY screamed again and again, and Buree shrank away in utter terror.

"Mary!" he croaked in stricken, agonized tones. "Oh, God, what have I done?"

Carver leaped forward, but Caldwell's detaining hand on his arm stopped him.

"Don't," he warned in shaken tones. "It's too late!"

Smoke filled the room and red, lurid flames burst forth. With a final despairing scream, Mary sank to the floor, writhing horribly. Almost instantly her body became a mass of crawling, livid red flames, mercifully concealed from vision by a billowing cloud of inky, oily smoke.

Buree turned on Magra insanely. "You devil!" he screamed. "This is your fault. *You* did this!"

He hurled himself upon the pirate and bore him back against the wall. Jerking himself from his dazed horror, Carver leaped forward to separate the two, but a roaring line of flame interposed its impassable menace between him and the battling men. The fiery barricade ran along a crack in the floor planks, evidently filled with carbon dust, possibly charcoal.

Baffled, Carver halted. Caldwell's fingers gripped his arm again.

"Come on," he shouted in an imperative tone. "We've got to get out of here before we're trapped!"

Beyond the flames came a hoarse scream of fear from Magra's lips. For Buree had lifted him on high and was hurling him directly into the mass of ravening red that covered the place where Mary's body had disappeared. Almost instantly Magra was a flaming corpse.

Staring wildly about him, Buree turned and plunged for the window, only to run squarely into another advancing line of fire. Writhing crimson sprouted from his body.

Whirling, Carver dashed to the doorway, where Ann stood, white as death.

"Oh, please come!" she begged. "We've got to get away from here!"

They raced in the darkness toward the ladder and the boat. Carver clam-

bered down first, lifted Ann after him, then assisted the aged scientist down. There came the crash of rending wood, and one of the walls of the room they had just left collapsed.

"Get out from under, quick!" gasped Caldwell, glancing back. "This warehouse will collapse in a few minutes."

Hastily Carver shoved the thole pins into the oarlocks and pulled heavily toward open water. He sent the little boat literally plowing forward as the din in the warehouse increased. Crashing walls announced further attacks by the flames, and Carver had barely hurled the boat from beneath the structure before the entire land end collapsed, sending a wave of water rushing out at them.

The boat whirled crazily, then settled again. Powerfully Carver pulled away, watching with horror the growing destruction behind them. Within five minutes the entire warehouse collapsed, its bulk replaced by a lowering mass of ravening flames and rolling smoke.

Coming toward them now was a launch and Carver stopped rowing, standing up in the boat to wave.

"It's a police launch," said Caldwell. "Hail it."

Carver loosed a bellow, and the launch swerved.

"What's going on over there—a thermite explosion?" yelled the man who leaned forward in the bow.

"Never mind," gasped Caldwell, also standing up now as the launch swung in. "Take me back to the mainland with all possible speed. That growing pile of smoke and flame back there is the worst menace Earth has ever faced! I've got to reach shore at once."

"Who are you?" asked the man, a police lieutenant, suspiciously.

"Professor Caldwell."

THE lieutenant stared. "Not the scientist just rescued from the pirates?"

"Yes. But never mind that. Get us aboard quickly! It's terribly important. We've got to stop those flames back there. Look! You can see for yourself what is happening now!"

Carver glanced back and paled as he saw immense flames rushing like a wave over the warehouses on both sides of the one already destroyed. They crumbled even as he watched, making the night a lurid hell.

"If this chemical fails to react, we are doomed!" said Caldwell tensely

"That fire's caused by carbon atom disrupters," said Caldwell swiftly, "and there's carbon *everywhere!* Does that mean anything to you?"

The lieutenant paled, and sprang into action. Carver lifted Ann aboard the launch, then assisted Caldwell to clamber up its side.

"Isn't this Ann Mitchell, the pirate?" began the lieutenant. "I'll have to arrest—"

"I'll be personally responsible for her," said Caldwell quickly. "I give

my word."

"That's good enough for me," returned the lieutenant.

Carver swung himself up and stood watching the havoc behind as the launch swept about in a close circle and sped for the opposite shore.

Caldwell gripped his arm and pointed to the water.

"That'll stop it for awhile," he said

grimly, then pointed to the bridges. "But those bridges will have to be dynamited before the flames reach them. Once they get to the mainland—"

"What's the difference?" asked Carver. "They'll get there anyway. There's nothing we can do to stop them."

"Maybe there isn't," said Caldwell, "but I must get to my laboratory immediately. On second thought, I'll go there direct—the authorities will find out soon enough that they must dynamite the bridges to slow the progress of the flames. Look back there. Our warning will be unnecessary!"

Carver stared back at the lurid horizon, shuddered as he saw the entire warehouse district a mass of roaring, leaping fire, the billowing black smoke hiding the lights of Earth's greatest city under an oily pall.

"Yes," he agreed. "You get to your laboratory. I'll see that the authorities understand what must be done."

Behind, an ominous roar drowned out even the noise of the nearing shore of busy New York itself.

CARVER tightened his grip about Ann's shoulders as they watched from the high window in the New York University laboratory in New York.

Boom!

"There goes the first bridge!"

Ann nodded. "Oh, I wonder if it'll do any good! What can Professor Caldwell have in mind?"

Carver's eyes mirrored the white and red brilliance of the night outside, made thus by thousands of powerful searchlights illuminating the upper end of the island, where nothing now remained but a huge mass of dully glowing red coals. Further south destruction raged, and the water was black with boats hurriedly taking off people marooned in the path of the roaring menace.

"I don't know," Carver admitted. "But if he didn't have something up his sleeve, he'd say so."

The sound of a door opening behind them caused them both to turn from their horror-stricken watching of the destruction across the water. Professor Caldwell, clad in a white laboratory gown, and with a haggard look on his worn features, stood in the doorway, beckoning.

"Come here," he said. "I want you to see something."

Together, they entered the inner sanctum of Caldwell's laboratory. On a workbench in the center of the room was a variety of scientific instruments, a gallon jug half filled with a colorless, waterlike fluid; and, strangest of all, a tiny woman's perfume atomizer with a small lump of hard coal beside it.

"I'm about to make a test," said Caldwell. "I'm rather afraid to witness its outcome by myself. If it doesn't work—" He halted significantly.

"What are you going to do, and what's that stuff in the jug?" questioned Carver.

"A chemical I have just formulated, derived from my research work on Pluto. It causes a heavy, extremely inert form of carbonic gas, when heated."

"And the lump of coal?"

"Pure carbon," returned Caldwell. "If the liquid, when sprayed on that lump of coal, causes some change, we'll be sure that I'm on the right track. And if it doesn't we'll have to try the liquid on the disrupters themselves, and trust to luck.

"However, if it reacts, it will save time, and the chemical can be easily and quickly manufactured in large quantities. If we act swiftly enough to meet the emergency before the flames progress too far, we may be able to blanket them out and extinguish them, besides destroying the disrupters."

"It's *got* to work!" exclaimed Carver.

Caldwell picked up the atomizer. "We'll see in a moment," he said.

With trembling hands he placed the nozzle above the tiny piece of coal and pressed the bulb vigorously. With a hissing noise the liquid sprayed forth, making the coal gleaming wet. Caldwell continued this operation until the coal was thoroughly wetted, then desisted and stepped back, his eyes fixed intently on the wet coal.

"Nothing is happening," breathed Ann in an anxious whisper.

"Wait," said Caldwell hoarsely. "Wait!"

Slowly the black surface of the coal began to grow dim, and gradually it became crystalline, transparent, except for a cloudy black at its core.

"Look!" gasped Carver. "The coal is turning transparent, like—like diamond!"

"Not diamond," corrected Caldwell in a whisper. "The specific gravity is too little. Merely a brittle crystal. But whatever it is, that doesn't matter. The important thing is that it reacts! And now, we must make the final, most important test. And this one involves danger."

"I'll do it," said Carver grimly. "Just tell me what you want done."

Caldwell considered. "Yes, you are best fitted to carry it through, being familiar with the actions of the disrupters. I have a delivery coming from the fire department within a few minutes; an asbestos fire-suit. With it, you must cross to Long Island and spray the flames themselves with the solution.

"I have a large paint spray machine which we can install in a boat, and by the time you are ready, I'll have several gallons of the chemical prepared. That should be enough to make the test. Meanwhile I'll be having great quantities made. I hope it extinguishes the flames."

"I have a feeling that it will," Carver breathed.

"Don't be too sure," Caldwell returned cautiously.

"ALL ready?" questioned Caldwell, anxiously staring out over the water at the burning island, almost hidden in smoke.

Carver, moving cumbersomely in his awkward asbestos suit, nodded and clambered down into the waiting boat.

"All set," came his muffled voice.

Ann stood palely beside the old scientist on the dock.

"Be careful, John," she pleaded.

He grinned reassuringly up at her through the mica visor, then settled himself heavily on the seat and started the motor. Slowly the craft moved off toward Long Island. Experimentally Carver operated the chemical gun and a heavy spray shot from the nozzle.

Nearing the shore, he slowed down, turning parallel and edging in closer. Right down to the water's edge crowded the ominous flames.

He brought the boat in close, picked up the spray gun and leveled it. A moment he hesitated, a vision of a lovely, screaming girl enveloped in horrid atomic flames rising before him. Then he pressed the trigger viciously.

Hissing loudly under the air pressure, a fine spray shot toward the flames at the water's edge. For many moments nothing happened, but Carver kept the gun grimly on one spot, until it became saturated. Nothing occurred beyond a slight hesitancy in the moiling movement of the flames.

Anxiously Carver peered at them; then he stood stock still. All at once a loud shout, almost deafening him in his helmet, broke from his lips.

"It works!"

It was true. The fire, in an area of perhaps a square yard, had vanished. Even as Carver watched, the flames were replaced by beautiful gleaming diamondlike crystals that reflected the lights of the menaced city beyond in sparkling flashlets. Nor did the fire encroach further. Then suddenly with a weird crackling noise the fire-jewels crystallized and shattered, becoming a blaze of reflecting glory as their surfaces became many-faceted.

John Carver, hardened space traveler, found himself sobbing unashamedly.

PROFESSOR CALDWELL gazed at the happy pair before him, holding their hands in each of his.

"I am an old man," he said softly, "but I've never been as happy as at this moment. I can't tell you how much your happiness affects me. This morning when Ann was pardoned for all her 'crimes' by the Federated Government, in exchange for the secret of the mystery ship and in recognition of your work against the disrupters, I'm afraid I acted as wild as an excited child."

"In recognition of *your* work, you mean," Carver grinned. "Any painter could have done more artistically."

"But not more beautifully," said Ann Mitchell glancing from the window to where the afternoon sun shone on Long Island, now a vast expanse of blinding crystal: a perpetual, gloriously colored monument, a new wonder of the world.

"An army of 'painters' did that," pointed out Carver. "But it is beautiful, and somehow innocent, even considering its evil beginning. As a lovely flower grows from an ugly stalk."

"It reminds me of Mary," said Ann wistfully. "So delicate, so beautiful, and so brave. It will always be a monument to her tragic sacrifice."

" 'Greater love hath no man,' " quoted Carver softly.

"Look!" Caldwell pointed south.

Rising into the air was a sleek ship, its graceful lines gleaming brilliantly in the sun.

"No longer a mystery ship," said Professor Caldwell. "There will soon be a great fleet of them, and the war will shortly be over. Such ships can't lose. And after the war, they'll mean the end of that corporate monster, Spacelines!"

He turned back to the pair beside him, opening his mouth as if to speak, and then thinking better of it. Smiling, he made his way to the door, closing it gently behind him.

WHEN THE ICE TERROR CAME

By Jack West

Claude Harper risked his life to prove the new tank on the battlefield—and plunged into a frozen hell of living death

"YOU Americans are fools!" Commander Willoughby said gruffly, holding his body in stiff military erectness. "Fools! But—" relaxing abruptly, he took a step forward and gripped Claude Harper's hand in his own, "—if you come back alive with that new tank, it'll mean the Allies have a weapon that will end this war in another six months—at least by 1943. Good luck, lad, and God be with you."

Claude Harper clenched the Commander's hand warmly and squared his broad shoulders. "I'll be back," he promised. "This new tank can't be touched by anything but a big gun, or a lake of nitric acid! And neither of them exist. Your own guns have wiped out all enemy big guns in this sector."

Commander Willoughby nodded wryly. "That's true, but we have precious few big guns left ourselves. This war is a deadlock right now."

Harper took a last look around the circle of grim faced army officers and technicians before he climbed into the newest American creation, the heavily armored Gardner Weather-and Gas-proof Tank. Their faces wore expressions of almost helpless incredulity, but they forced smiles of weary approval.

These men had seen three years of mechanical warfare since 1939. A new tank which would withstand all weather conditions and resist all gases was just another weapon that might end the war. But they had seen hundreds of new mechanical monsters of destruction since the war began, and none of them had worked miracles. Their disbelief in this new tank was obvious; also their admiration for the American who was staking his life against fate to prove its effectiveness.

Carefully Harper lowered the heavy ice-box-like door and bolted it in place. He settled himself into the leather seat and started the sealed electric motor. He checked the instruments. Inside and outside air temperature gauges, gas detector, inside air oxygen content, ground speed, battery charge—all were reassuring. He strapped the safety belt around his stomach. It made him feel like part of the machine. Slowly, deliberately, he eased the starting lever along its quadrant. With almost weird noiselessness the mysterious new tank dug its clawed tread into the mud and glided forward.

Harper watched the battle scarred

Harper snatched hastily at his gun and fired once as he dove back into the tank

country unfold like a fantastic movie through the bullet proof glass window. The test called for a run through a barrage of gas, water, and even shell fire in no-man's-land before the German lines. Observers would check the American tank's progress from airplanes.

Machine gun bullets thudded mufledly through the sound-proofing as they spanged harmlessly against the tank's hard armor. A small shell exploded in front of the machine, momentarily jarring it and spattering the window with thick watery mud. Shrapnel dug futilely at the diamond-hard steel.

The tank scrambled through the battered ruins of a Siegfried Line fort, groping like a huge caterpillar as it jounced from rock to rock. Harper reduced speed. He flicked a small arm labeled "Water" and headed the landship toward a shallow stream.

As the tank's nose came to the edge of the embankment, flashes of flame came from the opposite side of the stream. Machine gun bullets smacked against the tank, and Harper chuckled. Waste of ammunition, and the Germans had precious little of it left.

He edged the tank down the steep rock and gravel slope, its rubber padded treads feeling their way like a sensitive mountain goat as pebbles clattered down the slope and splashed into the water. The tank halted for an instant at the water's edge, then cautiously started across the stream.

Harper felt the treads dig into solid gravel. It was a signal of all clear ahead; no mud to mire him. Pushing the control lever forward, Harper watched the water spew away from the base of the tank. Then, without warning, it happened.

As if painted by the single stroke of a giant paint brush the observation window suddenly frosted over. A huge hand seemed to reach up from the bottom of the stream and clutch the tank in its palm. Harper pitched forward violently. The safety belt dug into his stomach. He banged his head smartly against the control panel. For a brief instant he saw the instruments, the frosted window, the throttle at "Full Ahead", heard the angry whine of a thwarted motor, then all was blackness.

HARPER shook his aching head in an effort to lift the curtains of pain hanging over his eyes. He strained to see the instrument panel, to discover some clue to what had happened. Everything seemed covered with a cloudy, milky film. He shook his head again, fiercely this time. The cloud went away and now he could see the instruments.

"What the hell . . ." he said. He stared. The sudden stop must have damaged them. The readings he saw just couldn't be! Once more he shook his head. But the telltale pointer of the outside temperature gauge remained steady. He was sure he wasn't still cockeyed, but there it was. The instrument registered 175° below zero Fahrenheit. Cold enough to freeze every living thing on the face of the earth!

Harper tried to get the tank moving again. He'd ride out of water, get out and make an inspection. Something must have gone wrong with the recording apparatus. Again and again the electric motor whined in protest as the clutch slipped and ground uselessly. In baffled bewilderment Harper pushed the levers to neutral. He reached over and brushed the frost away from the window. What he saw made him leap erect in amazement and awe. The entire stream, which a moment before had been liquid water, was now solid ice!

"I'm dreaming!" Harper gasped. "It can't be."

But it *could,* because there it *was*—solid ice quicker than he could have

snapped his fingers. The ice in the stream and the frost on the window were no dream; they were stark realities. And the reading of —175° on the temperature gauge dial was complete proof. Those instruments were the best known to science—they couldn't be wrong.

With a vast sense of horrible shock he realized that if he so much as stepped outside the tank, he'd become a frozen corpse, rigid as stone—and as dead! He was trapped! Trapped in a war tank frozen in the bottom of a stream, with a temperature outside rivaling that of outer space! It was fantastic, incredible.

The realization brought others —brought dire questions. What had happened elsewhere along the front? Was this cold terror confined only to his immediate locale, or did it extend . . .

"Great Gods!" he gasped. "What if it extends miles—hundreds of miles?"

If it did, whole regiments of troops would be wiped out—even that of Commander Willoughby.

And most important, what would happen to him? How would he get out of this icy trap?

As a grim answer to the last question, Harper shivered, and knew with a thrill of horror that the cold was penetrating into the tank. A cold chill skittered up and down his spine as he whirled to the inside temperature gauge. "Going down!" he exclaimed, "Fast!" The indicator *was* going down fast . . . 70° —65°—60°. At that rate he wouldn't last long. He shuddered. At least freezing to death was a pleasant way to go—

Suddenly he broke into a hoarse laugh and, reaching for the control panel, flipped a chromium switch. Immediately the whine of an electric motor sent its comforting message through the small padded compartment. The temperature gauge began to climb and Claude Harper rubbed his hands in relief. "So scared for a minute I forgot the tank had an air-conditioner!" he grunted a little shamefacedly.

TWO hours later Claude Harper eyed the outside temperature gauge hopefully. The temperature was rising! Slowly the frosty window cleared and the thermometer rose jerkily to +6° Fahrenheit like the hand of a stopwatch being clicked back to zero. There it slowed down and remained constant. Cold, but not too cold to brave the outside, even in his summer army uniform.

Determinedly Harper swung to the door and released the catches. He pushed. It didn't budge.

"Stuck!" he uttered in dismay.

Going to the side port, he gazed out. The tank was frozen in ice only to the bottom of the door, and it was only the water that had splashed up that sealed it. A couple of good hard blows . . .

Grimly he lifted a rifle from the wall-rack and grasped it by the muzzle. Then as an afterthought he reversed it once more and ejected the shells. That precaution taken, he swung it mightily at the frozen door. The echoes resounded in the confined space, and the gun butt splintered with the forces of his blows. But the dry cracking sound of shattering ice gave notice that the door was loosened.

One final smash Harper gave at the base of the portal, then he tossed the twisted gun aside and hurled his body against the door. It gave abruptly, hurtling him to the ice outside. Instantly he scrambled to his feet and stared around.

On the bank above him he saw a leering gunner, crouched behind the menacing muzzle of a machine gun pointing straight at him. Quick as lightning

Harper drew his automatic from its holster and fired a shot at the gunner, diving as he did so for the protection of the tank.

Icy chips flew from the gunner's shoulder. The figure swayed on its feet, then topped with a crash to the ice of the stream below. A cry of horror welled from Harper's lips.

"Frozen . . . *solid!*" he burst out.

With chills that weren't from the cold chasing up and down his spine, Harper restored his weapon to its holster and climbed the bank to scan the countryside. As far as he could see, between shell-torn tree trunks, barbed-wire entanglements, and ruined forts, nothing moved. The air of utter death lay over no-man's-land. Harper clenched his fists.

"Got to get out of here," he muttered. "This isn't war, it's hell—frozen hell!"

A few moments later Harper knelt alongside the tank, axe in hand, chopping desperately at the inprisoning ice. The tank had frozen in shallow water and, with enough chopping, he could get free.

It took an hour of hard work to partially free the treads, and Harper was almost exhausted with his efforts when he tossed the axe aside and stepped into the tank to make an effort to finally free it. All during his labors he had heard no sound, no gunfire, nor had he seen any sign of life. Even in the skies, no planes dotted the intense blue canopy, nor did the sound of motors drift down from the heights. It was as though the Earth itself had died. A great terror was gripping Harper's chest in a tight grasp, and his throat felt dry and choked.

"This thing had better move now!" he muttered in almost a whisper. Even that whisper startled him as it echoed in the still air.

There was something incongruous, yet amazingly comforting in the sound of the motors as he started them. The splintering and cracking of ice betokened the battle of the tank to free itself as he threw the forward lever ahead. There was a grinding sound, then the tank lurched, heaved, and jounced up from its icy prison to the surface of the frozen creek. Awkwardly it lumbered up the steep embankment, paused at the crest, then heaved its way forward over the frozen battlefield. Harper felt less ill-at-ease as he heard the steady whine of the electric motor and felt the snug warmness of the tank's interior.

He pushed the control lever still further forward and guided the land ship toward the nearest highway. It would be the highway to Nurnberg, he knew. He was now far inside the German lines. The tank heaved through a ditch and lurched onto the smooth highway. Pushing the throttle all the way forward, Harper watched the cement dart under his observation window as the tank sped along at 70 mph. Surely at Nurnberg he'd find out what had happened.

FIVE miles down the road he caught sight of a man standing alongside the highway shoulder observing his approach. It was an old farmer standing with his hands in the pockets of a tattered gray overcoat. Here was the first sign of life Harper had seen since the Freeze. The tank ground to a stop beneath his guiding hand just beyond the old fellow. Checking his automatic and thrusting it back into its holster without buttoning the flap, Harper twirled the hatch lock and climbed out of the tank to question the man.

"What has happened? Why has all firing ceased?" he asked in German, watching the man for a false move. But the farmer just stood there, his deep blue eyes staring straight down the

highway. The wind swept across the fields, chasing little swirls of dust onto the concrete. The old man's coat flapped grotesquely and his trouser cuffs whipped about his ankles. Bits of dust flew up in the old fellow's gray beard, and lodged in the whites of his eyes—

Slowly Harper turned and stumbled back to the tank, like a man condemned to solitary confinement for the rest of his life. Horror gripped him, and almost he turned back from the route to Nurnberg. What would he see in that city of 400,000? Abruptly he knew, and his knuckles grew white on the steering wheel. Then, face white, his jaw squared, he set the tank in motion again.

Entering the city Harper saw colorful Nurnberg apartment buildings that now looked forlorn and weird as curtains flapped listlessly from half-open windows. Everything was still and quiet. A group of men stood on a corner, one of them gesturing with his hand, his mouth open in speech, emphasis of the terrible suddenness with which the Great Freeze had come. Everywhere people stood just as they had when the Great Freeze struck—some opening doors, some eating, some reeling drunkenly, and some wheeling baby carriages. But many, too, lay prone upon the sidewalk or street.

Carefully Harper guided the tank through the streets. At times he had to edge carefully around groups of frozen pedestrians. On one occasion he looked down an alley to see a horde of rats frozen solid as they foraged in a garbage heap.

As the tank rumbled over the red-brick cobbles toward the center of town, the crowds of people became thicker. At last, rounding a corner near the center of town, he saw a sight that chilled him to the bone.

In a large clearing, stood a whole regiment of Nazi soldiers frozen solid, saluting the Nazi salute, mouths open as if they were saying, "Heil!" A man stood on the speaker's platform, his arm outstretched too. He had a small moustache, wore khaki breeches and shirt, Sam Browne belt, and a swastika armband. Over his head red, white and black flags drearily flapped in the breeze . . .

A HALF-HOUR later, Claude Harper sat at the control panel of the Nurnberg radio station, his face marked with concentration. His nervous fingers turned the sensitive dial as he sat anxiously listening to the loudspeaker.

Behind him, on the floor, lay the grim body of the operator he'd been forced to remove from the seat.

Static cackled noisily and an occasional squeal cut the silence as Harper turned the tuning dial.

Silence — nothing but silence; no sound of human voice or music. Was all of Europe frozen? All of the Eastern Hemisphere? What about the United States—was that engulfed by the Great Freeze too?

Harper felt sick, stricken, helpless. The magnitude of the disaster was sweeping over him in crushing waves.

Then he caught the sound of a voice in the microphone, faintly at first, louder as he tuned it in—

"Calling Europe, calling Europe, calling Europe, station WJZ, in New York, calling Europe," cracked the voice. "If any station in Europe or the Eastern Hemisphere hears this message, please attempt to contact us. We cannot raise you. All European and Eastern Hemisphere stations do not answer . . ."

The appalling grimness of the situation crystallized in Harper's mind. All of Europe, all of the Eastern Hemisphere—Russia—China—frozen solid!

"If anyone in Europe is alive and can

hear this message, please go to your nearest radio station and tell this country what has happened," continued the announcer. "A mysterious malady has suddenly stricken the United States and Western Hemisphere. The population is suffering from inflammation of the lungs due to a serious change in the atmosphere—scientists report that the oxygen content has been changed by some mysterious cause. Thousands are dying every hour in every city. The situation here is very serious. We must know what has happened. Is this condition world-wide?"

The words fell like a trip-hammer on Harper's brain. Somebody — some fiendish human invention was behind this Great Freeze. It had come too suddenly and disappeared too swiftly to be natural. Evidently the rapid adjustment in the climate had reacted on the Western Hemisphere to force the atmosphere into a readjustment of elemental structure.*

Suddenly he wondered if the oxygen content of Europe's atmosphere had changed too. He fished a package of matches out of his pocket and, tapping a cigarette on the control room desk, cautiously swiped the match across the under side of the desk. The match flared and settled to a normal flame. Taking a deep sigh of relief, Harper lit the cigarette and mopped his forehead with his handkerchief. Obviously the oxygen content of the air was normal and the danger of dying of lung-tissue inflammation was something he needn't worry about—yet.

GRASPING the chromium microphone stand in his right hand, Harper leaned anxiously forward as he switched a control switch to "Broadcast." Would it function? Could he operate the station with its personnel frozen? Was all in order in the engineering rooms?

"Calling America,—calling America," he barked into the microphone,"Claude Harper, American Engineer in Nurnberg, calling America. I think I'm the only person alive on this continent. Everyone has been frozen by a sudden incredible cold. Don't know what it is —something mysterious and weird has happened here. Apparently the whole Eastern Hemisphere is frozen solid! Do you hear me, America?"

For perhaps fifteen minutes Harper flung his urgent call into the ether, then abruptly the voice of the American announcer changed its own call to a direct answer.

"We hear you, Claude Harper," came the excited voice over the air. "This country asks that you do everything you can to help clear up this mystery. It is impossible for us to reach you except by radio. Our planes can't fly—the motors burn up. Ships have found the ice surrounding the Eastern Hemisphere impassable. Scientists here believe the trouble originated in Europe—in Germany. They have traced a strange new electrical wave which seems to come from near where you are. Please stay on this wave-length and contact us whenever you need information or can tell us what is happening."

Again Harper heard the crackle of static in the speaker. It was a lonely and forlorn sound, now that the voice was gone. He tapped his cigarette ash into a tray half-full of butts which, just

*Whatever elemental agency lies behind the cold which has stricken Europe and caused the change in the atmosphere over America has undoubtedly caused some physical change in the atomic structure of the air. Either a new form of oxygen, or a concentration of it, caused by molecular action, has resulted in a condition that causes rapid oxidization. This seems to be borne out by the symptoms mentioned by the American broadcaster. High fevers, and literal burning up of the lung tissue might conceivably come from an unusual oxygen phenomenon.—Ed.

hours previous, had been smoked by men who walked and moved about full of life. Now they stood or sat or lay grotesquely at their positions in the control rooms, studios, and offices. Harper sighed heavily and reached forward to turn off the broadcast switch. Then he froze, stung to rigidity. What was that in the speaker? Faint, far-off, almost inaudible—was it a voice? Pressing his ear tensely against the speaker, he listened with breathless tenseness. Then he heard it. It was a voice speaking in English with a strong German accent.

Turning the volume up and retuning as delicately as he could with trembling fingers, the words now came through the loudspeaker more clearly and distinctly.

". . . miles north of Nurnberg. *Herr* Claude Harper, speaking from the Nurnberg radio station, can you hear me? Claude Harper, please come to me. I need help. My name is August Hess. I live at 168 Crailsheim Road, five miles north of Nurnberg. Calling Claude Harper at Nurnberg. Can you hear me? Please answer. I am August Hess, physicist, at 168 Crailsheim Road, five miles north . . ."

Clutching the microphone to him, Harper barked hoarsely into it, his voice trembling with the excitement of the discovery that another living human being was within five miles.

"August Hess, I hear you," he shouted. "I hear you. Sit tight. I'm on my way. Do you hear me? I'm on my way."

Clearly the answer came: *"Gott sei Dank!* I hear you, Claude Harper. I am waiting. But hurry . . ."

NOT even in battle has a man ever driven a tank as Claude Harper drove his super-tank northward out of Nurnberg. When the speedometer registered four and a half miles, he slowed down and scanned the signposts for Crailsheim Road. In a few moments he saw it, swung down it. The number he sought was just beyond the turn, and Harper brought the tank to a grinding halt before the stone wall and iron gate of an almost medieval castle.

He took a quick glance at the clock before he clambered from the tank. Twenty minutes—to cover the distance. Not bad, considering the thousand obstacles to travel existing in a city stricken in its tracks.

With a weird sensation of expectancy, he gazed for a moment up at the stone edifice, its solid battlements, its deep-set windows, its walls covered with withered, cold-blighted ivy. The walls surrounding the grounds were grim, gray stone, and the grounds themselves were park-like, dotted with magnificent oaks and pines, stricken now by the Freeze.

"Whoever August Hess is, he must have plenty of money and power in Germany," said Harper to himself.

He unhasped the iron gate, swung it heavily open, and walked rapidly up the gravel walk to the large oaken door of the mansion. Grasping the heavy knocker in his hand, he banged it loudly against the panels. The sound of it echoed through the house in ghostly reverberations.

There was no answer.

"Creepers . . ." muttered Harper. "This is the right number. Something must have happened . . ." He banged loudly again, then when the echoes had died away, he laid a hand on the knob and pushed. The door cracked open, swung back and crashed heavily against the wall with a tremendous clatter.

"Damn!" said Harper, crossing the threshold.

Then, abruptly, his blood chilled in his veins. He stood stock-still, staring through the half-gloom of the imposing

hallway beyond.

There, standing beside a tall window, one slim hand clutching the drapes, the other carelessly toying in halted motion with a gleaming golden locket at her breast, was a lovely girl, half-turned toward the door as though anticipating his entrance.

But her blue eyes didn't see him. They were fixed and staring—and cold! Her honey-colored hair wisped gently about her neck as the cold wind from the door behind Harper spurted gustily into the room.

"Yes," came a hoarse, sobbing voice from the gloom, "is it not terrible, the thing that I have done? My beloved daughter . . . standing there . . ." The broken sobs of a tortured man cut off the words as Harper turned slowly to face the speaker, forcing his gaze away from the lovely, grim figure of the frozen girl with an effort.

"You—are August Hess?" he questioned. His gaze took in the stooped figure of an old man, with white hair, and a tear-streaked face. It was a noble face, in spite of the grief that lined it, and Harper was struck deep with conviction that here was a man who could not have committed a crime, especially the inference that his choked-out words had carried. . . .

"What terrible thing?" he went on. "You can't mean that—that this awful cold . . . the Great Freeze . . . ?" he halted.

The old man nodded slowly, advancing with trembling steps. "I do mean it," he answered self-accusingly. "I am the cause, though I did not intend it to be *this*, of the thing that has visited the world—and taken my own daughter from me."

"But how . . . ?" began Harper, then halted as the old man advanced past him, extended a trembling hand as if to touch the arm of the girl, then withdrew it without contact.

"My Agnes . . . my beautiful Agnes," he cried brokenly. "I cannot even touch your poor frozen hand. I am afraid . . . because it will be so cold, I know . . . *cold!* But . . ." he turned abruptly, fiercely, toward Harper, ". . . *not dead!* Not dead, do you hear me? I am not a murderer!"

"Not dead . . ." Harper was dazed. "What do you mean?"

"Come, Herr Harper," said Hess more quietly, "I will show you what I have done and you must tell me how you escaped."

HE led the way to a small walnut paneled library and went over to one of the bookcases. He reached behind the books and apparently pulled a switch, because the whole bookcase slid outward on hinges.

Noting the look of surprise on Harper's face, Hess explained, "This is an old castle and, as you will presently see, I had good reason to use secret passages and dungeons. I know it sounds like a story-book, but this is a nation at war—and my secrets are secrets that must be kept from certain persons. You will understand, Herr Harper, when you have seen. Please follow—"

Harper followed the elderly man down a steep flight of stone steps into a typical dungeon. One thing, however, caught his attention. The medieval underground hideout was equipped with modern lighting and ventilation, and obviously well insulated. Hess stopped before a huge door like that used on meat iceboxes. He struggled with the thick door and swung it slowly open.

Harper was an engineer and he had been in thousands of factory laboratories and experimental plants, but never had he seen a plant that could surpass what he saw before him now. Dull blue mercury vapor lights threw

their rays on humming generators, hissing turbines, and a host of machine tools —all operating in a cavern large enough to hold an army blimp.

"Now I will explain," declared Hess as he took a position at a huge control panel filled with shining instruments and switches. "I will not bother you with where I get power to run these machines—all you need to know is that it is power furnished by the sun. You will, however, understand presently that this great Freeze, as you so aptly put it, is caused by these sun-power machines, and is my doing. My doing . . ." he said in sudden pain, then resumed his normal pedantic tone.

"These machines create intense cold by slowing molecular activity," carefully explained the gray-haired little man. "This slowing of molecules causes cold.* I control the degree of temperature by changing the frequency of my molecular control waves." He pointed to a dial which was calibrated in degrees Centigrade.

"On the towers of this castle are concealed camouflaged antennae," Hess continued. "I have hidden all my equipment because if the Nazi German Government would discover my invention and use it for their war—" he halted a moment, then resumed. "I wanted peace; wanted to freeze only certain areas and disorganize all tactics until fighting became impossible, not freeze whole armies. Then I felt I could force the diplomats to come to peace by implied threat and forced futility.

"War is the senseless acts of fools. I thought I could stop it scientifically. *But now I have frozen all of my people and brought a deadly danger to America and the rest of the world.* Am I, too, a senseless fool?

"I don't know how my waves caused all this, but they did. Some unforeseen effect, unrealized in my small-scale laboratory tests . . ." He faltered and his shoulders dropped wearily.

Stepping forward, Harper eased the kindly little scientist into a nearby chair. "You can't very well blame yourself," consoled Harper. "Science has often played mean tricks on mankind—gotten out of hand. Anyway there may be some way of thawing out these people. You say your daughter is not dead. If she isn't, then . . . And, too, my weather-proof tank protected me. We have something to work on."

"My sealed dungeon here saved me," said the little man. "But *nothing* saved my daughter. She stands up there, silently torturing me for the crime I have put on all of humanity."

HARPER sat down beside the old man. "Listen," he said decisively. "You've said your daughter isn't dead. Now just what do you mean by that?"

"She is frozen only," said Hess. "If you knew much of science, you would realize that the quick-freezing of any animal or vegetable substance does not result in the cell-expansion and rupture that occurs in slow-freezing. Therefore, in an instantaneous freeze, there is no damage—just a complete suspension of activity. My daughter—all the peoples of Europe and Asia—are in a state of suspended animation, and if I were to allow the temperature to rise above freezing, slowly, carefully, almost all would revive . . ."

Harper leaped to his feet. *"Revive!"*

* The heat of anything is caused by the rate of vibration of the molecules in it. Thus, an iron bar, when cold, is comparatively slow in its molecular vibration. It is heated, and the molecules increase their speed until they create friction and the bar turns red, then white, and finally melts. Thus, August Hess, controlling the rate of molecular vibration by means of his waves, can cause temperature changes. Slowing down the molecules of the atmosphere would cause it to become very cold. At absolute zero, which has never been reached, the molecular action would be entirely stilled.—Ed.

he shouted. "My God, man, then what are you waiting for?"

Hess' face went haggard. "Because there are two things you don't know, yet. Two things that are more horrible than a frozen world."

"Meaning . . ." Harper asked with a strange chill clutching at his vitals.

Hess rose to his feet. "First, the dangerous condition that exists in the atmosphere over America and the parts of the world untouched by the Great Freeze . . ."

"And . . . ?"

". . . the thing I shall show you now," finished Hess. "Come, and you will see."

He led the way to a smaller room off the main laboratory, where Harper reeled back as he saw a corpse on the floor, a bullet-hole through the forehead.

"What's this?" he gasped. "This man . . ."

"I killed him," said Hess lowly.

"Killed . . . ?"

"Yes. I had to. He was mad—violently insane."

"Insane?"

"I revived him, and he was like that. Something about the vibration wave destroyed his brain. Something I cannot understand. His body was not harmed by the Freeze, and his brain should have been no exception—yet he was mad. I saved my own life only by swift ruthlessness. He was a frothing, raging beast, intent on murder. . . . Now you see why I cannot revive the frozen ones. It would mean a continent of mad killers, a horror such as has never been loosed on the world by even such terrible things as the Black Plague, or the War itself. And my own daughter . . ."

Abruptly August Hess turned to Harper and clutched his lapels. "Over the radio you said you were an engineer. An electrical engineer. I am a physicist. And I am baffled. If we could get some clue as to what happened . . . what unknown quantity of my vibration wave caused this thing to happen to the brain—and is causing a deadly condition in the atmosphere on the other side of the ocean . . ."

"The other side . . ." repeated Harper suddenly. *"The other side!* Man, I've got it!"

"You . . . you have . . . ?" faltered Hess.

"Yes," Harper went on excitedly. "Don't you see? Your wave, on this side of the earth, was strong enough to cause the Great Freeze, but on the other side, it was too weak to accomplish that result, and only succeeded in causing a molecular disturbance of the air, rather than a molecular slowing down. Now, if that is right, we can prove it . . ."

". . . *by using my wave at half-power on a sample of air here!*" finished August Hess with a rapid rush of excited words. "My American friend—you have given me one of the clues I sought . . . the other—" He bit his lips abruptly and turned hastily to his laboratory. Harper followed.

In the hours that followed, Claude Harper and gray-haired August Hess worked feverishly changing generator setups, switching wires, adding condensers, inserting baffles. Wrenches flew, bolts twirled, generators were turned on and off in hasty power tests.

Only the spare and emergency generators were being converted and the changeover would then be made at the throw of a switch, to broadcast the new wave. The original generator must maintain below freezing temperature, or horror would indeed be loosed on Europe.

At length there came a pause in their activity.

"Now," said Hess, "if the air reacts,

we will broadcast this new wave and correct the molecular disturbance of the air . . ."

For a moment arcs crackled as Hess turned a switch that sent the new generators into action, then a steady whine arose, and a beam of power waves concentrated on a large tube of compressed air. Hess watched a gauge, and in a given reading, switched off the generators.

"Try the air," he said hopefully. "If it causes a flame to burn more brightly, your theory was correct, and we can at least correct the atmospheric condition that exists over America."

Harper lifted the tube, held its nozzle against a gas flame, and opened the petcock. A slight hissing sounded.

"It works!" he shouted suddenly. "It works! The flame is brighter!"

He turned off the petcock.

"Then we are ready," said Hess wearily, sweat streaming down his lined face, exhaustion evident in his stooped posture. "We have solved one problem. Go to the short wave radio upstairs and listen in to America when I send out the new wave. Observe what happens, and if the results are what we expect, return immediately. We will then attempt to solve the real problem. If we are wrong about this new wave correcting the atmospheric disturbance, then we will switch back to the original wave."

WHEN at length Harper had the short wave radio attuned to the American station, he listened intently as a musical selection was played through to its end. Then as the announcer came on, he muttered in disgust.

"More music!" he snorted. Then his face wrinkled in a puzzled frown as the announcer chuckled audibly, although there seemed nothing humorous in his routine announcement of the selection.

"What's the matter with him?" Harper muttered. "It's a network program too. He'll be called on the carpet . . ."

The selection that followed ended abruptly before it was half-finished. The announcer returned:

"We interrupt the program for a special news broadcast. According to latest reports, the havoc in large cities is spreading. The oxygen phenomenon that is causing so many deaths has spread to material things. Fireproof buildings are ablaze, and Chicago, Philadelphia, and New York are fighting disastrous blazes. The George Washington Bridge, which is visible from this studio, is a mass of flames, giant steel girders blazing fiercely, like so much kindling wood. The situation is rapidly becoming grave. And as yet, there has been no word from Claude Harper, the American engineer isolated in Nurnberg, Germany, where the mysterious waves emanate.

"A curious, and perhaps alarming phenomenon that has been reported is the apparent outbreak of madness and insanity in certain localities. This may be tied up with the recent wave of hilarity that struck New York, causing even your announcer to go into uncontrollable spasms of mirth, which even now result in the spasmodic chuckles you have been hearing.

"However, the mirth wave stopped as suddenly as it began, just a matter of ten minutes ago, which coincides with reports that insane persons became normal about the same instant.

"Whatever this strange terror is, that has emanated from some war-mad European laboratory, science has yet to track down. And it seems that unless we hear from our only hope on the other side of the ocean, Claude Harper. . . ."

The announcer's voice ceased abruptly, and Harper leaned forward tensely. But in an instant it resumed, this time vibrant with excitement.

"I have just been given a note which says the fire at the George Washington Bridge has gone out! Just a moment, ladies and gentlemen, while your excited announcer checks on this with his own eyes . . . *yes, it's true* . . . and as I read further scientists at the Mellon Institute report that the wave from Europe has *changed!*

"*They believe that the atmosphere has returned to normal!* Can it be, ladies and gentlemen, that over in Germany, Engineer Claude Harper has discovered the source of the deadly waves, and has corrected them—or is this wild thought of mine just another evidence of the strange madness that has afflicted . . ."

But the voice of the announcer was forgotten as Claude Harper leaped to his feet and whirled from the room.

"*Madness!*" he shouted. "No, my excited friend, you aren't mad! And neither will. . . ."

Abruptly there came a rumbling explosion from below, and the crash and clatter of falling, smashing machinery and glass.

"Great God!" exclaimed Harper, hurling himself down the stairs toward the laboratory. "Something has gone wrong!"

SMOKE, the stench of chemicals, and dust rose in his face as he burst into the laboratory. He choked.

"Dr. Hess!" he called. "Dr. Hess, where are you?"

There was no answer, and Harper groped about in the ruins of the outer laboratory until he stumbled over the limp form of the German physicist. Kneeling he placed a hand inside the shirt, and felt the heart beating.

"Alive!" he exclaimed. "He's not too badly hurt."

Leaping once more to his feet he plunged into the next laboratory room and shut down the generators of the freezing wave. The silence that settled was ghostly, and he stared around for a moment, a shudder running through him.

"What if I'm wrong. . . ?" he whispered. "If my hunch is wrong . . . a continent of mad killers— And Agnes. . . . ! Great God, no! Not her!"

For an instant he almost turned the generators on again, then with a muttered prayer on his lips, he turned from the room.

Lifting the limp body of Dr. Hess in his arms, he bore it upstairs to a bedroom and placed the unconscious man between the sheets. As he did so, Dr. Hess uttered a groan and opened his eyes. For an instant he stared around.

"Take it easy, Dr. Hess," said Harper soothingly. "Everything is all right. There was an explosion, and you were knocked out. No serious injuries."

"Explosion—" Hess sat up in alarm. "The generators . . . they must be repaired . . ."

"No," said Harper, pressing the old man back firmly. "They are all right. They were not damaged. But I have turned them off. The wave is no longer being broadcast . . ."

"No longer being broadcast. . . !" Hess stared in horror. "You turned the wave off . . . *Du lieber Gott!*" He struggled to rise.

"Listen," said Harper, gripping the old physicist's wrist, "I must tell you something. When we broadcast the atmospheric neutralizing wave, I heard the reports from America, and a strange madness that had affected many people vanished, as did all the other phenomena. Even steel bridges, burning in

the strange oxygen-saturated air, became cold—fires went out—when our wave reached them. Whatever caused the madness of the man you killed, of those people over in America, was also neutralized by our wave. And so, I turned off the freezing wave . . ."

Hess looked haggard. "You took such a drastic step merely on a . . . a . . ."

"Call is a hunch, if you will," said Harper grimly. "But it is done now—"

"What if your—hunch—is wrong?"

"Then, it will be horrible, but no more so than the war that has been raging for three years. And just in case I am wrong, we are going to get into my tank. It will be the only safe place for us . . . you and Agnes and I."

"*Agnes . . . !*" August Hess started as though he had been stung. "My lovely daughter. Let me up, Claude Harper . . . we must take care of her. We can go to your tank afterward. We must restore her heart action, bathe her in increasingly warm water—don't you realize, man, that many of those frozen ones will never revive, because their hearts will not be stimulated?"

HARPER reached the frozen girl just in time to catch her toppling body in his arms.

"She is t h a w i n g already!" he breathed.

Behind him, Hess pulled at his arm. "This way. We must get her into a warm tub immediately. That, and massage, and at the right moment, adrenalin . . ."

Harper followed the old physicist up the stairway to a bathroom, held the gradually drooping form of the lovely girl in his arms while Hess drew warm water. He stared down at her white face, and felt the cold chill of her body through his own clothes.

"She's lovely . . ." he muttered, as though aware for the first time of her blonde beauty.

"Take her clothes off," said August Hess. "I'll get some warm blankets to wrap her when we take her from the bath . . ."

"Her clothes . . . ?" faltered Harper.

"Yes—yes, man. We can't massage her properly with her clothes on . . . hurry. I will be back in a moment." The aged scientist seemed to have forgotten his own hurts in his anxiety for his daughter.

When he had gone, Harper drew a deep breath and began to undo buttons with trembling fingers.

An hour later Harper sagged back into an easy chair, resting his tired arms, while his eyes remained glued on the warm, pinkly flushed face of the girl, who now lay warmly bundled in her own bed. August Hess bent over her, his aged body a dynamo of energy, his trembling fingers steady as ice now, as he plunged home a hypodermic needle of adrenalin. When he withdrew it, he stepped back and waited.

"*She's breathing!*" exclaimed Harper, half-rising from his chair.

Suddenly August Hess burst into tears and sank down on the foot of the bed. "My beautiful daughter . . ." he choked. "She is alive—but if she is insane . . ."

"No!" gasped Harper. "No. She mustn't be . . !"

Suddenly both men became aware of a growing roar outside the house. It seemed to be the shouting of a mob.

August Hess drew erect tremblingly. "The people of Nurnberg!" he faltered. "Shouting . . . a mob . . . the soldiers—"

Harper crossed to the window and stared out. What he saw was meaningless for the moment, then he cried out in wonder.

"They are smashing their weapons!" he exclaimed. "They are breaking up their guns—and—*they are singing;* like children!"

He flung open the window, to admit a warm, fragrant breeze. The sound of happy voices, singing simple, childish songs, swelled up from the roadway beyond the stone wall.

"Singing—like children," said August Hess in amazement. "Claude Harper, you were not entirely right in your hunch. These people are not insane, but they have returned to the simplicity of their childhood."

"And the peacefulness of childhood," said Harper. As the words left his lips he thought of a regiment of soldiers standing in a square, saluting a motionless figure on a balcony—

Whirling, he gripped old August Hess by the shoulders. "Peace!" he exclaimed. "August Hess, peace has come to Europe at last! *Peace,* do you understand?"

"Yes," replied the old physicist. "I do, Claude Harper. Death has come to some, but to those of us who are left —peace."

Behind them a soft voice called weakly.

"Daddy. Daddy Hess, where are you? What has happened to me?"

And when Claude Harper turned, to see Agnes Hess sitting up in bed, her eyes wide, childlike and trusting, he knew that something else had come—to him. And suddenly he knew also that he was going to take this lovely child-woman in his arms and begin to teach her again the things the wave had erased from her now-virgin mind. It would be an easy task—and a very pleasant one.

MONTHLY MERIT AWARD

EANDO BINDER, Author of "Adam Link's Vengeance," $50.00

MALCOLM O. BLACKWOOD, 220 N. Marquette Rd., Prairie du Chien, Wisc., $10.00

There they are, the winners of our February awards. Eando Binder collected first prize for the second consecutive month with an Adam Link story, which conclusively proves the enormous popularity of this unusual character. Adam Link has become the most famous character ever to come out of science fiction. Long may he live! Congratulations, Mr. Binder. You can well be proud of this achievement.

Malcolm O. Blackwood won his prize with a 100% rating, proving that he too, knows a good story when he sees one. Accept our heartiest congratulations.

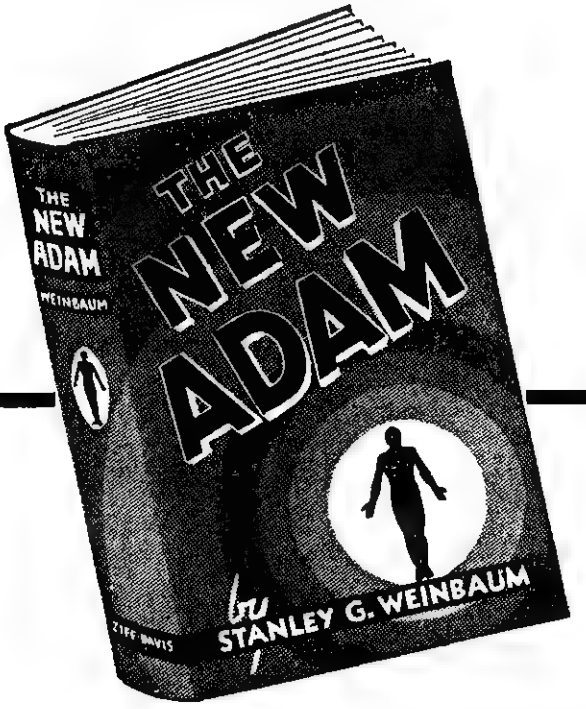
Beginning with this issue, we are discontinuing the Monthly Merit Award.

However, the editors of this magazine continue to invite the opinion of the readers in regard to special merit in any story that appears in our pages. Stories by authors whose work is popular with you readers will most certainly earn for their creators additional rates as a reward. The editors feel that we can better these prize awards to the greater satisfaction of the writers without the chance factor of being "lucky" having any bearing on reader opinion.

But don't forget to vote on the March issue, if you haven't, as yet. Prize winners will be announced in our May issue, and don't forget that the April front cover is the reader award for that issue. It will be appropriately framed. And already, according to the opinions expressed in our mail, this cover is proving the most popular one we have run to date. It's by McCauley.

If you haven't already voted, do it now!

—The editors.



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Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of things scientific and pseudo-scientific. We offer it solely for the pleasure it gives you and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine. If you rate 50% correct in your answers, you are considerably ahead of the average. Give yourself 3 points for each correct answer.

TRUE AND FALSE

1—In fishes the heart is divided into but two chambers. True.... False....

2—Anther is the name given to a species of ant found in Africa. True.... False....

3—When the center of gravity of a body is raised the stability is increased. True.... False....

4—Human beings can hear sound at a frequency of about 3000 vibrations per second. True.... False....

5—Cosmic waves have a wavelength shorter than that of x-rays. True.... False....

6—If a bar magnet were broken in two, the end that was originally the south pole would form a north pole at its broken edge. True.... False....

7—The process by which a solid changes to a vapor is called sublimation. True.... False....

8—The day always begins at the International Date Line. True.... False....

9—The cochlea is part of the ear. True.... False....

10—To be able to see an amoeba you would have to use a fluoroscope. True.... False....

(11) Radio waves are least absorbed when travelling over sea water. True.... False....

(12) Oil emursion lenses are only applied in telescopes. True.... False....

(13) In an ordinary houselight socket there flows 280 volts of electricity. True.... False....

(14) Nicotine, that is found in tobacco, is a poison. True.... False....

(15) The Gregorian Calendar was made for religious purposes and not for agricultural purposes. True.... False....

(16) Interior planets are planets like Mercury and Venus. True.... False....

(17) The shadow cast by the pointer of a sun dial goes completely around the dial. True.... False....

(18) People in the northern hemisphere are farther away from the sun when they are having summer. True.... False....

(19) Shatterproof glass is made by compressing a transparent celluloid sheet between two plates of glass. True.... False....

(20) Red gives the greatest effect of closeness and blue for distance. True.... False....

MATCH THESE!

( )	1—Franklin	A—Best conductor of electricity
( )	2—Thunder	B—The green rust on copper
( )	3—Silver	C—Proteid in coagulated blood
( )	4—China	D—Discovered by Roentgen
( )	5—Horse-power	E—Caused by clotting of blood or bursting of a blood vessel in the brain
( )	6—Gyroscope	F—Carries the germ of sleeping sickness
( )	7—Apoplexy	G—Obtained from the white poppy
( )	8—Calory	H—His kite-flying experiment established the identity of lightning and electricity
( )	9—Ambergris	I—Used to stabilize ships
( )	10—Verdigris	J—Wrote on lives of insects
( )	11—Opium	K—A disturbance of air by a discharge of electricity
( )	12—X-rays	L—Used in making perfume
( )	13—Tsetse fly	M—A unit of heat
( )	14—Fabre	N—Unit of power
( )	15—Fibrin	O—Place where gunpowder was first developed

BRAIN WORK

(1) What was the date of the year before 1 B.C.?

(2) How is most salt obtained?

(3) What are neap tides?

(4) What is the width of a standard gauge railroad track?

(5) What is the use of the logarithmic tables?

(6) What does the science of numismatics mean?

(7) What is the difference between a long ton and a short ton?

(8) From what is most paper made?

(9) What portion of an iceberg is above water?

(10) What two primary colors when mixed together make green?

(Answers on page 143)

Meet the Authors

JOHN RUSSELL FEARN Author of WAR OF THE SCIENTISTS

THIS story, with its basic theme of Martian hegemony by an unexpected race of deadly bacilli, might have been inspired by the present European War, though this was not the case. I plotted it out as long ago as last Spring, but the new world shaking events across the Channel seemed to make it expedient to get the yarn finished.

I have written it not as a slant on the present War, but as a possible forecast of the future wherein Man may come to regard the present conflict of bombs, guns, and men as a mere afternoon tea party by comparison with war against science of the highest degree. In this day and age man fights man; it is something he can to a great extent understand though he may not understand the diseased motives which precipitate War in all its unholy filth In the future, however, perhaps even in 1980 where I have set the story, he may come to facing the things depicted in this yarn It is possible, though I hope highly improbable.

Whether the idea of transferring scientists to another world to work in a fair measure of peace is practical or not I do not know, but it seems to me it is logical enough. The hint, in the early chapters, that the men of science are future warmongers hardly needs embellishing by me—but so far I've seen no suggestions as to how to stop it. I offer this effort as a possible way out, and I'll be the first to donate a check to the cause when somebody uses the idea in actuality.

Some will perhaps question the notion that bacilli are the last race of any planet. In response I can only say I've seen the inference in three books on evolution and all seem pretty well agreed on the following order of existence—Man, termite, termite ousting man Bacilli ousting termite. Finally, bacilli. So there we are. If I have done nothing else I have tried to show there are perhaps worse things than the wars of men.—*John Russell Fearn.*

MILTON KALETSKY Author of REVOLT OF THE ANTS

THE date of my arrival on this planet is recorded in many history books. Oh no, not because I was born then, but because the Lusitania was sunk about that time. I grew up very fast—upward, but not outward—until I could have gotten a job in a circus as Jojo, the One-Dimensional Man.

Whenever the truant officer caught me, I went to school, where I accomplished very little besides annoying the teachers. That's all right, *they* annoyed *me* plenty. Every time I said three times two was seven, they insisted it was five.

Time skidded on and suddenly at 13 I was a science fiction fan. Today, at 24, I'm still a fan. In between, I've not always been true to this first love, but it's been true to me. By now it's in my blood permanently. So to AMAZING STORIES, science fiction's pioneer—hail! To *Fantastic Adventures,* for all the chills and thrills it's given me—*ave!*

Time staggered on some more and lo! I was a college humor magazine writer and editor on one hand, and a student of physics and mathematics on the other. How these two opposed talents (?) got into one person I don't know, but they've been fighting around inside me ever since. When I concentrated on science, I collected a couple of college degrees, (for sale, cheap, practically new) and a license to teach in New York high schools. (Oh job, where art thou?) When I concentrated on writing—well, you can see the results for yourself in this magazine.

I like: blondes, brunettes, redheads, coffee, tea, steaks, cigars, *Fantastic Adventures,* Jack Benny, Charlie McCarthy, brunettes, Information Please, all sciences, redheads, classical music, AMAZING STORIES, blondes, Shakespeare, history, democracy, blondes, brunettes and redheads.

I don't like: swing, liquor, modern art and poetry, economics, dictators and the movies.

What does that make me? Shucks, why ask embarrassing questions?

For the future, I'd like to write many more stories and articles for AMAZING and *Fantastic;* I'd like to work for the United States Weather Bureau, as meteorology, the science of the weather, is now my chief scientific interest; and I'd like to see Halley's Comet when it returns in 1986.

So long—and I'll see you all again soon!—*Milton Kaletsky.*

DAVID WRIGHT O'BRIEN Author of FISH MEN OF VENUS

WHEN I was in kindergarten and our teacher assigned various make-it-yourself duties to the pupils, the only knick-knacks I was willing to fashion were boats. I made big boats, little boats, fat boats and slim boats, refusing to spend any time with anything else. My family, on being informed of this, said, "It means that the child wants a nautical career." They then planned that I should revive a family tradition and go to the United States Naval Academy.

The fact of the matter was that I made boats because they were the easiest things to fashion, a piece of paper, a daub of paste—presto! My second reason for making boats was the paste. I liked the flavor and, when no one was looking,

(Concluded on page 142)

QUESTIONS and ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department, AMAZING STORIES, 606 S. Dearborn St., Chicago, Ill.

Q. Scientifiction has long employed the "death ray" as an instrument of death. Is there actually such a thing in existence today?—L. Wachtel, Philadelphia, Pa.

A. In New Jersey, mosquitoes have been eliminated from swamplands by powerful ultra-violet lamps. This is the nearest that the "death ray" has so far been realized, newspaper stories to the contrary. In the present European war, many people thought that Hitler's "secret weapon," as yet unrevealed, might turn out to be some kind of lethal ray. The nearest approach to this is an unconfirmed rumor that the French had invented a genuine ray machine which would pulverize any obstacle within a range of yards. This latest horror, however, has likewise failed to show up.

* * *

Q. Why is tungsten so valuable in tool making? —A. J. Carr, Hollywood, Calif.

A. Tungsten steels are invaluable in the manufacture of cutting tools because of their hardness. Tungsten has a hardening effect on alloy metals in general. Stellite alloys containing cobalt, chromium and tungsten, being very hard, are used not only for cutting tools but also for surgical instruments.

* * *

Q. Are birds very fast fliers? Have their flight speeds ever been calculated?—H. Kaufman, New Orleans, La.

A. Birds by their very nature are built for speed. Averages taken indicate that small songbirds skim along at 20-37 miles per hour, crows 31-45 m.p.h., plovers 40-51 m.p.h. and wild ducks, 44-59 m.p.h. This is no mean speed, especially when a little sparrow can produce 13 wing strokes per second.

* * *

Q. What is the condition that causes a person to be classified as an albino?—M. B. Sherman, Mt. Vernon, N. Y.

A. Albino is simply a biological term for a person whose skin is lacking in pigment. This pigment itself depends on chromogens—color bases, themselves having no color—in the tissues, plus ferments—enzymes—which act upon these chromogens to produce color. Thus, if either chromogens or enzymes are absent in the skin, the person is an albino: pink eyes, white hair, pale, almost bluish-white skin.

* * *

Q. What is this so-called "heavy water," and what is its practical application?—Arrol Kingsley, De Land, Fla.

A. "Heavy water" is deuterium, or heavy hydrogen: the isotope—a varying form—of hydrogen, whose atomic weight is two. Deuterium is particularly valuable in the study of metabolic changes within animals; i.e., changes effected through digestion. This deuterium is given in the food.

* * *

Q. Isn't dynamite the basis of the Nobel Peace Prize?—Roy Wright, Springfield, Mass.

A. In a manner of speaking, yes. The five annual Nobel prizes are provided by a fund established under the will of Alfred Bernhard Nobel, the inventor of dynamite, which he patented in 1862. His great fortune, however, came not only from the manufacture of dynamite but also through his holdings in the Baku oil fields.

* * *

Q. What is the Carrel-Dakin treatment of wounds?—Roy Harris, Cleveland, O.

A. A World War-developed antiseptic for infected wounds. It contains free chlorine, and during the last war saved many lives and many amputations. The open wound is saturated with this solution, which unlike carbolic acid or iodine does not damage living tissue.

* * *

Q. Just what is meant by "cracking" oil?—J. Bernard Sey, Atlantic City, N. J.

A. Crude oil is "cracked" under high temperature and pressures to produce gasoline. "Cracking" is simply destructive distillation, the breaking down of large molecules into smaller ones, the result being gasoline. There are other methods of producing gasoline—straight distillation from crude oil, and from natural gas.

* * *

Q. We hear so much nowadays about the "electric eye." How is the thing constructed, how does it operate?—Ted Reiss, New York City.

A. The "electric eye" is the popular name for the photoelectric cell, which has developed increasing uses—opening doors, motion picture sound projectors, inspection of mechanical flaws in manufacturing. This photoelectric cell is simply a radio-like glass bulb for measuring light intensity. It consists of a coating of silver within the bulb. A very thin layer of a metal such as potassium is deposited on this silver film. A collecting electrode is fixed in the bulb's center, which is sealed through the glass, while in the same manner a metallic connection is made with the potassium. Then, a small area of silver is removed from the glass for the entrance of light.

DISCUSSIONS

AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brick-bats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

ADAM LINK AND LOVE

Sirs:

Your February issue was very good except for Binder's "Adam Link's Vengeance." As a story it was quite entertaining, but the plot was maddening. For Adam Link, love is impossible. His iridium-sponge-controlled mind wouldn't be sufficient to make him fall in love with any woman, much less a robot. You see, love is an emotion governed entirely by sex and the sexual instinct. Link (Adam, I mean,) has no sex, and therefore, I think you will agree, could not be sexually attracted to Eve, nay—even to Hedy Lamarr.

Clayton Stoddart,
536 Western Ave.,
Lynn, Mass.

Your editor thought that Binder had stressed the attachment of Adam Link for Eve Link as due to her mental accomplishments, her kindness, etc. And personally, your editor won't admit (and not just because he's either stubborn or unwilling) that love is just a sexual emotion. We're not that scientific. And we certainly say you're wrong when you say the mind Binder gave Adam Link, which was on a par, and even above, the best human minds, was not capable of developing regard for another.—Ed.

A REAL ACCOMPLISHMENT!

Sirs:

Adam Link is rapidly becoming one of the most outstanding and best-known characters of science-fiction, ranking with Tarzan, Flash Gordon, Buck Rogers, etc. To give to a mere robot an appealing personality is a real accomplishment, which makes Binder an author of the first class.

Roger Sherman Hoar,
1265 Fairview Ave.,
South Milwaukee, Wis.

Maybe Mr. Stoddart will agree about this "personality" thing. It's something to consider, and if Adam Link has it, he's capable of many things, even if he is only a "mere robot."—Ed.

CAVE MEN

Sirs:

We have been enthusiastic readers of AMAZING STORIES for quite some time and have liked all of your stories, especially the article, "Do Cave Men Still Live?" by James F. Scheer, which you published in your February issue. This article was of great interest to us for we have heard a similar story of south-eastern Alaska, which was told to us by a Forestry Foreman who was then living in that part of Alaska.

We would greatly appreciate more information on Mr. Scheer's article for, we believe, there may be a connection between the two stories.

W would also like to communicate with the Vancouver Museum for further information on their activities concerning their expedition.

James B. Burdick,
c/o E. Laville,
Renton Route No. 2,
Hazelwood, Wash.

We haven't any more information than was given in the article; however, if you wish to communicate with the Vancouver Museum, it would be possible to reach them, simply by addressing the museum at Vancouver. We are glad to note your interest.—Ed.

MAYBE . . .

Sirs:

I have just finished reading the February issue of AMAZING STORIES and I especially enjoyed "Truth is a Plague" by David Wright O'Brien. However, I did notice one thing in the story which was *too* amazing. On Page 65, Edie is mentioned as a *blonde;* on Page 66 she is smoothing her *dark* hair. Quite a transformation even for a bubble dancer, don't you think? Perhaps the truth gas *did* get into the apartment and change her hair to its true color.

Norman Kelner,
199 Sumach St,
Toronto, Canada.

We've heard of these bubble dancers doing some quick-change stunts. Maybe this was one? Or maybe your editor ought to admit he slipped up on the proof-reading, eh? Sorry, old man, we'll try to be more careful in the future.—Ed.

EXPLAINED?

Sirs:

With reference to your article on "Suspended Animation" in your January issue. I wish to have cleared up, if possible, a point which has bothered me, and possibly many other readers too.

Since the mystery of aging or growing old has been explained as being due to the destruction of the body cell tissues by the continual bombardment of Cosmic energy or rays, how would it be possible

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to evade that condition which seems as inevitable as time itself.

I would appreciate seeing this matter discussed.

Edward G. Graham,
Brampton, Ont.

So far as we know, the mystery of aging hasn't been explained as being due to cosmic rays. It has been suggested that cosmic rays might *be the cause, but there are other theories just as tenable. For instance, the accumulation of waste products on blood-vessel walls. We give you this as an example only, since there are many other possible ways for age to come to a living body.—Ed.*

ROSES FOR BOND

Sirs:

I have picked Nelson Bond's "Sons of the Deluge" as the No. 1 story in the January issue because Bond tells something more than just another story. His footnotes show that he knows more interesting and amazing scientific facts than the rest of us will ever hear of. If he continues on this way, he will soon become a better writer than Bram Stoker and James Branch Cabell (Dracula and Jurgen), who were masters of this kind of story.

Charles E. Balleisen,
3110 Russell Rd.,
Alexandria, Va.

SCIENCE—RIGHT AND WRONG

Sirs:

First place in the December issue is occupied, I think, by Manly Wade Wellman with his story "Hok Goes to Atlantis." Assuming that the Atlanteans existed at all, the story places their city in the most probable place, in the valley that is now the Mediterranean Sea. Furthermore, the characters are all very plausible and the whole setting makes not only the people of the story, but also the story itself very plausible.

Closest competitor is Bond's "Fugitives from Earth," but it suffers from two scientific errors: One is the apology for not using the forward rocket tubes of the space ship "Goddard." If the exhaust from a rocket is say one mile per second, it is always one mile per second *relative to the ship.* There would be, and there could be, no backwash. If that were the case you would also have to say that you could not fire a gun from a moving space ship in the direction of the flight. Or an arrow from a fast bow and arrow, a fast moving car. The latter can be tried any day if a bow and arrow, a fast car and a road where speeding does not at once bring a summons, are at the disposal of the experimenter. The second error is the transformation of the crew of the space ship "Oberth." What hard radiation could do is to change the offspring, but not the people themselves. This is a most serious mistake . . . still I liked the general idea of the story.

Willy Ley,
35-33, 29th St.,
Long Island City, N. Y.

Note these corrections, Mr. Bond. And thanks for your monthly letter, Mr. Ley. You certainly keep us posted.—Ed.

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WERE the great personages of the past victims of a stupendous hoax? Could such eminent men of the ancient world as Socrates, Pericles, and Alexander the Great have been deluded and cast under the spell of witchcraft—or did the oracles whom they consulted actually possess *a mysterious faculty of foresight?* That *the human mind can truly exert an influence over things and conditions* was not a credulous belief of the ancients, but a known and demonstrable fact to them. That there exists a wealth of infinite knowledge just beyond the border of our daily thoughts, which can be aroused and commanded at will, was not a fantasy of these sages of antiquity, but a dependable aid to which they turned in time of need.

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30x5.00-20	2.85	1.35
5.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	3.05	1.35
31x5.25-21	3.25	1.35
6.00-17	3.25	1.40
28x6.00-18	3.25	1.40
29x6.00-19	3.35	1.45
6.00-17	3.40	1.45
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A Correspondence Institution

(Continued from page 5)

newest member, one of the Johns Hopkins faculty . . . the chap who's building the new atom-smasher there . . . is an AMAZING STORIES reader and never misses an issue. So, he tells me, are the rest of the physics department there. He (name withheld) gives an amusing description of himself, and his colleagues, all taking time out from the work on the new atom-smasher and reading or discussing the current AMAZING STORIES.

IT seems inventors have been reading AMAZING STORIES too! Just listen to these new patents as reported to your editor by the patent office: Future style note—cellophane leggings to keep silk stockings dry in wet weather—also a magnet clipped to the dress to hold hairpins while milady is arranging her hair—and a self-propelled electric iron —*and* (we give up!) an automatic windshield wiper for vanity cases.

For the poor male, this: A non-skid hanger on which trousers will not bunch up by sliding sidewise.

For anyone: Shoe chains to keep pedestrians from slipping on icy sidewalks, and (they go well together) an inflated rubber (bicycle) seat . .

But not for us: A small motor driven fan for removing foam from beer. (We *like* the foam!)

Almost sensible: A special rear bumper which a parking motorist can crank out until it extends backward several feet, thus foiling the guy that always squeezes in so close *you* can't get out!

Dirty trick: Sponge-rubber bait for mousetraps. Can't be nibbled off without springing the trap. (It won't "give.")

We're stumped: A slipper with a whistle built in the toe. When the toe bends, it toots! (But why? *Why?*)

"YOU haven't lifted any science from the Bible lately," protests a reader. "Your column is slipping badly. It's a glorified contents page." Well, Mr. Reader, here's a column without a mention of a story in the issue. And as for the Biblical science, we've always wondered just how the River Jordan was held back, as though "it were a wall." Moses stretched forth his "staff" and the waters rolled back, permitting the Israelites to walk dryshod across the stream. And another bit of scientific miracle performed with this same "staff" is the smiting of the rock and the bringing forth of water.

It would seem that Moses had some sort of a "force gun" there, in the mysterious "staff" he carried. He just pointed it at things (oddly enough water was always a part of the feat) and the job was done.

(Concluded on page 142)

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★ **MARCH ISSUE** ★

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THE OBSERVATORY

(Concluded from page 141)

So, your editor has only one comment to make on Biblical science this time. he'd like to have a time machine and get a look at this "staff" Moses carried. It might go great in a modern vaudeville act! And seriously, your editor thinks the science back of it would be extremely interesting to us all.

And that, dear readers brings us to the end of another series of observations. Your comments are welcomed, and our observations may well comment on your comments, if they possess as much significance as those of the reader just mentioned See you all next month. *Rap.*

MEET THE AUTHORS

(Concluded from page 135)

ate tons of the stuff on the sly. I still relish an occasional spoonful of it.

Everyone was disappointed when I didn't go to Annapolis, but they never suspected my real reason for making boats. When I announced that I wanted to write they shook their heads. They felt I was making a grave mistake in forsaking a naval career. Today, as I write more and more, they are positive I should have gone to Annapolis

My penchant for paste must have been what led me into newspaper work, for every city room has at least ten paste pots lying around. At any rate I found myself working on a metropolitan news bureau. The work was all that I wanted, for it gave me the chance to do the two things I liked best in life, write, and eat paste.

At present I'm unmarried, although I can't say I haven't tried. Some day, however, I'll find a girl who can cook up a nice pot of paste. Then we'll settle down comfortably on her moderate salary. *—David Wright O'Brien, Chicago, Illinois.*

CORRESPONDENCE CORNER

Corlene Berwald, 4027 Prescott St., Dallas, Tex, wants to correspond with any SF fans; 15 yrs. . . . Clayton Stoddart, 536 Western Ave., Lynn, Mass., wants to hear from scientifans anywhere, particularly England, interested in science in general, and psychiatry. . . . Noel Dwyer, 10 Manning St., Waverley, Sydney, N.S.W., Australia, is desirous of having a couple pen pals, boys or girls, about 15 yrs. . . . Joseph Marcus, 2017 S. Beechwood St, Philadelphia, Pa., wants to hear from either sex concerning their opinions of future space travel; 24 yrs. . . . Joseph Marcus also wants to know from the weaker sex, why they give up cook books, love stories, etc., for scientifiction stories. . . . Laurence Dube, 10 Lowell Ct., Leurston, Me., has back issues of AMAZING STORIES and various SF magazines for sale at 20c each to first buyer. . . . Sylvester Brown, Jr., 7 Arlington St., Cambridge, Mass., wishes to procure old copies of "The

Shadow" and "Doc Savage" . . . Harrison Cunningham, Pleasant Hill Rd., RFD No. 2, August, Me., would like pen pals in the U. S. and England, Scotland. . . . Claude Held, 494 Carlton St., Buffalo, N. Y., would like a pen pal between 15 and 20. . . . N W. Turnbull, 124 Tarcutta St., Wagga Wagga, New South Wales, Australia, wants pen pals interested in seas, ships and sailors, preferably in U. S. Navy. . . . Abraham Oshinsky, 2855 W. 25th St , Brooklyn, N. Y., is forming the International Astronomical Society and invites anyone interested from any part of the world to get in touch with him. . . . Bill Grill, 434 Hays Ave., Mt. Oliver, Pittsburgh, Pa., is 19 yrs. and would like to hear from either sex between 16 and 20 interested in everything; all letters will be answered promptly. . . . John Cunningham, 2050 Gilbert St., Beaumont, Tex., wants pen pals, from Hawaii especially. . . . A. R. Charpentier, 4541 Rusk Ave., Houston, Tex., wants back issues of AMAZING STORIES. . . . Robert Jennings, 909 E. Maple St., Jeffersonville, Ind., desires to trade SF magazines prior to 1935 for recent issues, and wishes to correspond with anyone between 15 and 16 interested in SF and Astronomy. . . . Norman W. Siringer, 17710 Franklin Blvd , Lakewood, Ohio, wishes to sell copies of AMAZING STORIES and other SF magazines; prices start at 10c, postpaid. To Allan R. Baker of Cleveland: Norman Stringer has tried unsuccessfully to contact you by letter concerning the SF club. Inform him of date of next meeting. . . .

QUIZ ANSWERS

(Quiz on page 134)

True and False

1—True	5—True	9—True	13—False	17—False
2—False	6—True	10—False	14—True	18—True
3 False	7 -True	11 True	15—True	19—True
4—False	8—True	12 False	16—True	20—True

Match These!

(1) H	(4) O	(7) E	(10) B	(13) F
(2) K	(5) N	(8) M	(11) G	(14) J
(3) A	(6) I	(9) L	(12) D	(15) C

Brain Work

(1) 2 B.C.

(2) It is mined from deposits found in the earth.

(3) Low tides which occur in the beginning of the second and fourth quarters of the moon.

(4) Fifty-six and one-half inches.

(5) To facilitate arithmetical calculations.

(6) Coins and medals.

(7) 2,240 pounds is a long ton and a short ton is 2,000 pounds.

(8) From wood pulp.

(9) About one-seventh.

(10) Blue and yellow.

ROCKET SHIPS YET?

A thunderous roar trails away to a screaming crescendo! We look sharply heavenward! Expecting to have fully a squadron of fighting planes confront our eager gaze, we are startled to see only one huge craft streaking across the azure sky, billows of oily black smoke trailing in its wake! But what a ship it is! Looking like a huge projectile, it is characterized by the complete absence of wings, in fact, of any form of lifting surfaces whatsoever! It's not a dream . . . it's not a "stunt" . . . but a definite reality! Don't fail to read "Rocket Planes Yet?" . . . one of the many fascinating features on aviation in the

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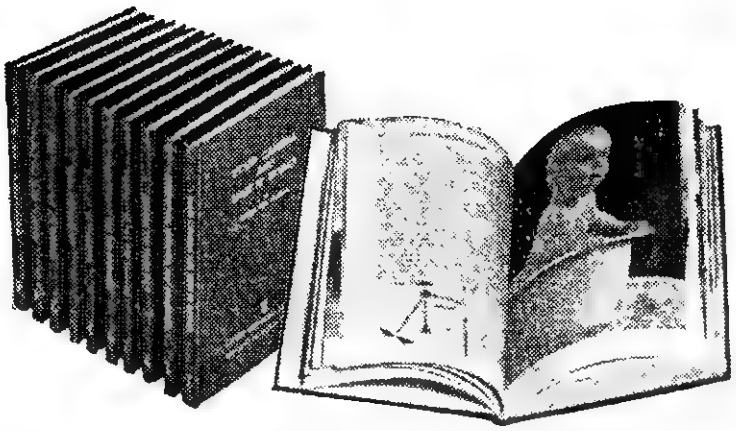

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COLONIZING THE OCEAN BOTTOM

By HENRY GADE

(See back cover painting by Julian S. Krupa)

Plans for colonizing the ocean floor are not new. It is a recognized fact that immense wealth exists in the sea, and the possibility of future colonies and cities there is not too far fetched.

MANY engineers have advanced plans for establishing colonies on the ocean floor. It is not an idea without feasibilities. Some of the points that might be advanced in substantiation of this future dream are easily forecast.

On the back cover this month, artist Julian S. Krupa has ably depicted a future colony on the sea floor. He has envisaged a city wherein many wonderful things might occur. In imagination, let us make a tour of this city.

First, we will disembark at the landing pier, securely anchored above the city. This pier is capable of handling large ocean liners, and is very similar to the artificial islands for plane bases proposed some years ago for Atlantic air travel, and later interestingly used as the basis for a successful movie.

Descending to the city below, which is built in between one hundred to four hundred feet of water, we find that it is constructed almost entirely of sphere-shaped, or dome-shaped architectural designs to give sufficient strength to withstand the great weight and pressure of the water above and around it. All of its buildings are connected by strong steel and concrete tunnels. In effect, the whole city is a single unit, although each section is isolated by means of air and water locks, so that in the event of damage to any portion, other parts of the city would be safe.

We are agreeably surprised by the cool, even temperature of that atmosphere, and the amazing purity of it. We find that this is due to the giant air-conditioners which form a really gigantic and important part of this undersea colony. Since air is so vital, the builders of the city have spared no science to make it the most perfect part of the city. Healthy air is maintained, and is constantly being purified by great chemical purifiers. Temperature, which is easy to maintain in the thick construction, is uniformly 70 degrees. It does not vary. And all glass portions of the city are double-walled, with currents of moving air circulating between, to eliminate any possible condensation, which might lead to damp, unhealthy conditions.

Entering one large building, we find great intake valves, through which sea water is passing, and from which all manner of things are being extracted. The water supply of the city is produced here, distilled and freed of salt and impurities. By various methods, gold, radium, various salts, phorphorus, and a wealth of other products are extracted.

Fish products, oil, foods, are an important industry in this undersea city, and many of these intake valves trap enormous numbers of fish.

The cultivation and harvesting of edible seaweed, and the extraction of drugs, and medical extracts from these undersea growths takes up another large series of buildings. Vital vitamins are extracted from them and exported to surface cities. Fertilizer is made of the residue, and also sold to land areas because of its extreme richness in phosphates and nitrates.

The munitions manufacturers of the world also find a source here for explosive bases.

As we tour the city, we find it a complete and self-sufficient civilization, entirely independent of the countries above water. We realize that here is a means of increasing the livable area of the earth by three times as much as previously, when man was forced to subsist only on areas above water.

The political problems of an over-crowded and economically strained world can easily lie in these undersea colonies.

When man finds ways to build cities under water, he will have literally discovered two new planets upon which to live. He will begin a wave of prosperity that will last for hundreds, perhaps even thousands of years.

The advantages of cities under the sea are numberless, and not the least of these is the elimination of danger from storms, cyclones, snow, cloudbursts, and all the natural weather phenomenon that make city building above water a constant struggle. Even temperatures, more stable and predictable conditions, insure the permanence of structures. The life of concrete below water is much greater than above water. At such depths, there is no deterioration due to contracting and expanding from temperature changes.

The day may not be far off when the first undersea colony is established. Perhaps only a small diving bell, but it will be a start . . . and after that—who can tell how far it will go?

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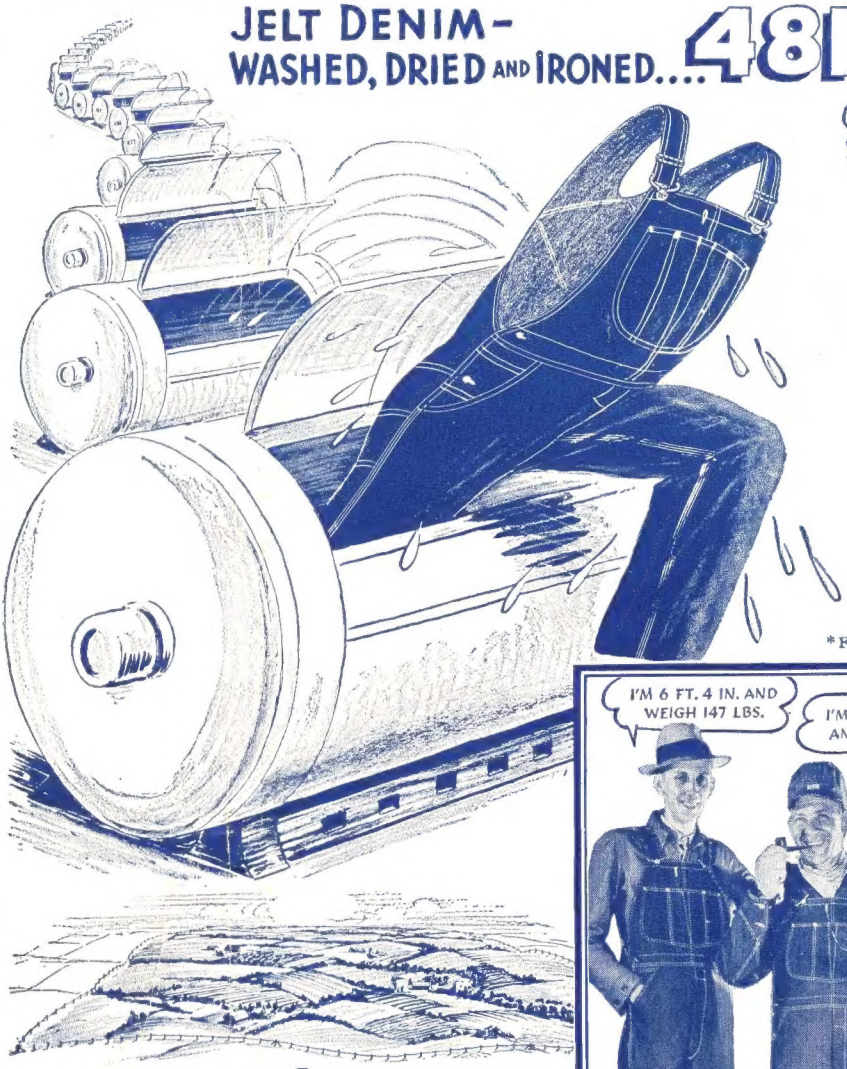

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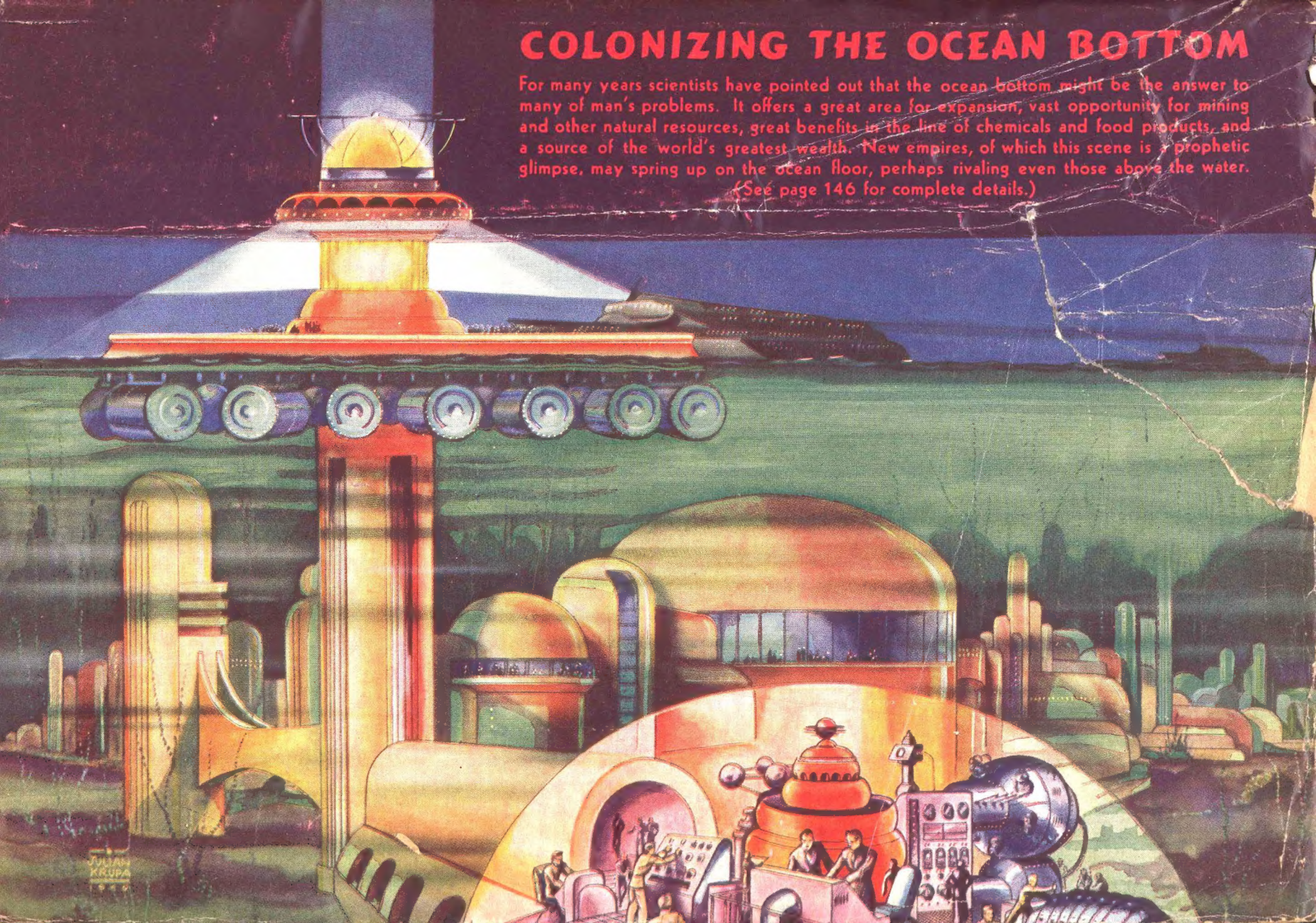

COLONIZING THE OCEAN BOTTOM

For many years scientists have pointed out that the ocean bottom might be the answer to many of man's problems. It offers a great area for expansion, vast opportunity for mining and other natural resources, great benefits in the line of chemicals and food products, and a source of the world's greatest wealth. New empires, of which this scene is a prophetic glimpse, may spring up on the ocean floor, perhaps rivaling even those above the water.

(See page 146 for complete details.)